

DOCUMENT RESUME

ED 394 276

FL 023 621

AUTHOR de Reuse, Willem Joseph
TITLE Siberian Yupik Eskimo: The Language and Its Contacts with Chukchi.
REPORT NO ISBN-0-87480-397-7
PUB DATE 94
NOTE 494p.
AVAILABLE FROM University of Utah Press, 101 University Services Building, Salt Lake City, UT 84112 (\$50).
PUB TYPE Books (010) -- Reports - Descriptive (141)

EDRS PRICE MF02 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Diachronic Linguistics; Discourse Analysis; Eskimo Aleut Languages; Foreign Countries; Grammar; *Language Patterns; Language Research; *Language Variation; *Linguistic Theory; Morphology (Languages); Sociolinguistics; Syntax; Uncommonly Taught Languages; *Verbs; *Yupik
IDENTIFIERS Alaska; *Chukchi; *Language Contact; USSR

ABSTRACT

The study provides a description of the verbal derivational suffixation, postinflectional derivation, enclitics, and particles of the Central Siberian Yupik Eskimo language as spoken on St. Lawrence Island, Alaska and on the coast of Chukotka, in the Soviet Union. It also shows how these elements participate in a network of four tightly-knit grammatical subsystems (verbal derivational suffixation; discourse enclitics; inflectional verbs moods; and adverbial and conjunctive particles borrowed from Chukchi, a neighboring Paleo-Siberian language), presents implications of the relationships among these subsystems for the theory of autolexical syntax and the theory of language change (particularly concerning contact-induced morphological and syntactic change in a polysynthetic language), and documents the history and sociolinguistics of grammatical and lexical influence of Chukchi on the Eskimo and Bering Sea area. (MSE)

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ED 394 276

SHIBETAN-YUPIK-ESKIMO

The Language and Its Contacts with Chipkani

William Joseph de Koeke

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Siberian Yupik Eskimo

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The Language and Its Contacts with Chukchi

Willem Joseph de Reuse

University of Utah Press

Salt Lake City

Studies in Indigenous Languages of the Americas
Wick R. Miller, series editor

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Printed on acid-free paper

LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA

Reuse, Willem Joseph de, 1955—

Siberian Yupik Eskimo : the language and its contacts with
Chukchi / Willem Joseph de Reuse.

p. cm. — (Studies in indigenous languages of the
Americas) Originally presented as the author's thesis (Ph. D.).
Includes bibliographical references.

ISBN 0-87480-397-7 (acid-free paper)

I. Yuit language. 2. Yuit language—Foreign elements—
Chukchi. 3. Chukchi language—Influence on Yuit. I. Title
II. Series.

PM 94.R48 1994

497'.1—dc20

93-50808

Contents

	HISTORY OF THE SSILA AWARD	ix
	EDITOR'S NOTE	x
	ACKNOWLEDGMENTS	xi
CHAPTER 1	INTRODUCTION	1
1.1	The Siberian Yupik Languages and Central Siberian Yupik	1
1.2	Previous Work on Siberian Eskimo and Chukotan	5
1.3	Scientific Significance	8
1.4	Data and Field Procedure	9
1.5	Outline of Chapters	13
1.6	A Sketch of CSY Grammar	16
1.6.1	Phonology and Orthography	16
1.6.2	Morphophonemics	17
1.6.3	Morphology and Syntax	24
1.6.3.1	General Observations	24
1.6.3.2	Noun Cases	30
1.6.3.3	Verb Moods	39
1.6.3.4	Derivational Morphology	53
1.6.3.5	Interaction of Derivational Morphology and Syntax	56
1.7	Spelling Conventions for Native Languages Other than CSY	62
CHAPTER 2	THE CENTRAL SIBERIAN YUPIK VERBAL POSTBASES	64
2.1	Issues in Eskimo Postbase Grammar	64
2.1.1	Soviet Approaches	65
2.1.2	Fortescue's Approach	68
2.1.3	Autolexical Syntax	71
2.2	VV Postbase Grammar: The Present Approach	75
2.2.1	Productivity in Derivational Morphology and "Internal Syntax"	75
2.2.1.1	Preliminary Remarks on Productivity	75

2.2.1.2	Lexicalized Combinations of a Base and a Postbase	77
2.2.1.3	Lexicalized Combinations of Postbases	80
2.2.2	Postbase Ordering	83
2.2.2.1	The Order of Elements in Lexicalized Combinations of Postbases	85
2.2.2.2	Postbase Ordering in Productive Combinations	89
2.2.2.2.1	Problems in Treating Eskimo Postbase Ordering	90
2.2.2.2.2	The Morphological Module	94
2.2.2.2.3	The Semantic Module	97
2.3	A Partial Description of CSY VV Postbase Ordering	99
2.3.1	PreAUX Postbases	100
2.3.2	Class-Free Postbases	100
2.3.3	Negative Postbases	102
2.3.4	AUX Postbases	110
2.3.4.1	The AUX Node	110
2.3.4.2	The Position Classes	113
2.3.4.3	The IMPUTATIVE-1 Node	121
2.4	Mismatches between the Morphological and Semantic Modules	123
2.4.1	"Split" Lexicalized Combinations	124
2.4.2	Postsyntactic Derivation and the Semantic Module	129
2.5	A Classification of VV Postbases	132
2.5.1	Conventions and Organization of Entries	134
2.5.2	Outline of Classification	135
2.5.3	A Classified List of Productive CSY VV Postbases	138
CHAPTER 3	POSTINFLECTIONAL MORPHOLOGY	170
3.1	Postinflectional Derivational NV Morphology	170
3.2	Postinflectional Morphology with Adverbial Words and Particles	173
3.3	The Postinflectional Postbases of CSY	184
3.3.1	Discussion and Analysis	184
3.3.2	Presentation of the Data	197
3.3.2.1	Postinflectional Postbases without Following Inflection	197
3.3.2.2	Postinflectional Postbases with Following Inflection	220
3.4	Postinflectional Inflection in CSY	228

CHAPTER 4	THE CENTRAL SIBERIAN YUPIK ENCLITICS	231
4.1	The Phonology of Enclitics	232
4.2	The Function and Distribution of CSY Enclitics	243
4.2.1	Individual Discussion of CSY Enclitics	243
4.2.2	General Observations on the Function and Distribution of CSY Enclitics	287
4.3	The Relative Order of Enclitics	288
CHAPTER 5	CHUKCHI AND SIBERIAN ESKIMO: CHUKOTKA AND THE BERING SEA AS A LINGUISTICS AREA	295
5.1	A Sociolinguistic History of Chukotka and the Bering Sea Area, with Particular Reference to Eskimo and Chukchi	295
5.2	Cultural Evidence for Chukchi and Eskimo Linguistic Contacts	307
5.2.1	Evidence in CSY Clan and Place-Names	308
5.2.2	Evidence in CSY Personal Names	312
5.2.3	Evidence from CSY Folklore	314
5.3	Trade jargons in the Chukotka and Bering Sea Area	319
CHAPTER 6	CHUKCHI LOANWORDS IN CSY AND THEIR INFLUENCE ON CSY MORPHOLOGY AND SYNTAX	330
6.1	The Evidence of Chukotan Dialect Variation	331
6.2	Lists of Nonparticle Loanwords	343
6.2.1	Nonparticle Loanwords from Chukchi in CSY	346
6.2.1.1	List of Nonparticle Loanwords from Chukchi	348
6.3	List and Index of Particle Loanwords	362
6.3.1	List of Particle Loanwords from Chukchi	366
6.4	Nonparticle Loanwords from CSY in Chukchi	409
6.5	The Extent of Chukchi Borrowing into CSY	413
6.5.1	The Theoretical Importance of Borrowings from Chukchi	413
6.5.2	Possible Explanations for Chukchi Borrowing into CSY	414
6.6	Morphological and Syntactic Consequences of Particle Borrowing	421
6.6.1	Types of Morphological and Syntactic Influence	421
6.6.2	The Relationship between Enclitics and Particles	425
6.6.3	The Relationship between Postbase Morphology and Particles	429
6.7	Conclusions	452

ABBREVIATIONS	456
REFERENCES	459

Tables

TABLE 1	The Taxonomic Phonemes of CSY	18
TABLE 2	The Corresponding Graphemes of CSY	19

History of the SSILA Award

Catherine A. Callaghan

OHIO STATE UNIVERSITY

It has long been a concern of mine that the emphasis on theory in departments of linguistics will prevent prospective scholars from electing to do descriptive work, particularly on Amerindian languages which are in danger of extinction. Specifically, these scholars cannot afford to risk unemployment after they complete their Ph.D. programs. As a result, I proposed in 1988 that the Society for the Study of the Indigenous Languages of the Americas (SSILA) should present an award for an unpublished manuscript from a junior scholar that most significantly contributed to our knowledge of the indigenous languages of the Americas. A junior scholar would be defined as an untenured scholar, with or without academic affiliations. It was my hope that such an award would contribute to the hiring and promotion of such people.

The work could be a monograph, a long article, or other substantial effort. It was to be basically descriptive or historic, and it might or might not include a theoretical component. The SSILA Executive Committee concurred and agreed to be judges, with the immediate past president acting as chair. The award would be presented annually, with the stipulation that years might be skipped if no deserving candidates were available. After some discussion it was decided to call it the SSILA Award. Thanks largely to the efforts of Wick R. Miller, the University of Utah Press agreed to consider for publication the award winner as well as any submissions the committee deemed to be of high quality.

A call for submissions was announced in 1989. Because of the small number of entries, judging was postponed until 1990. The first SSILA Award went to "Studies in Siberian Yupik Eskimo," a Ph.D. dissertation by Willem Joseph de Reuse. Honorable mention went to "A Grammar of Nisgha Language," by Marie-Lucie Tarpent.

It is hoped that these awards will promote high-level Amerindian scholarship, especially among young linguists.

Editor's Note
Wick R. Miller

We are proud to initiate the *Studies in Indigenous Languages of the Americas* series with this study by Willem Joseph de Reuse. This study is more than just a contribution to Eskimo linguistics. It is also a contribution to autolexical syntax, grammatical change introduced through language contact, lexical acculturation, and the socio-linguistic history of the Bering Sea area. We are proud to initiate the series with a volume that will set a high standard for those that follow.

This study was the recipient of the 1990 SSILA Award. Award winning manuscripts that followed are now in various stages of preparation. We hope the light of publication will shine on them in the near future.

While this series was initiated as an outlet for the SSILA Award winning manuscripts, it will not be limited to them. We invite submission of other manuscripts that fit the SSILA guidelines: a substantial data-oriented descriptive or historical study, regardless of theoretic (or lack of theoretic) orientation.

With the proliferation of linguistic journals and series over the past few decades, one hesitates to start a new one. But there is a need for an outlet for long, substantive, data-oriented studies of indigenous languages of the Americas, and we hope this series will satisfy that need.

Acknowledgments

This study is a slightly revised and updated version of my 1988 Ph.D. dissertation. I thank Michael Fortescue, Steven Jacobson, Larry Kaplan, and Michael Krauss for their suggestions and corrections to this version.

Data for this study were gathered during two fieldtrips to Nome, Alaska, with visits to Fairbanks, Savoonga and Gambell, Alaska, in 1985. I would like to express my deep gratitude to the following people, who served as outstanding consultants, patiently and accurately answering my many questions while also extending their hospitality to me: in Nome, Tim Golodgergen, Tim Golodgergen, Jr., Gordon Irrigoo, Vera Metcalf, John and Della Waghiyi, and Nick Wongittilin; in Savoonga, Jimmie Toolie, John Waghiyi, Jr., and Walter Wongittilin; and both in Nome and in Savoonga, Mary Ann Wongittilin and her son Ronnie and daughter Regina. I also enjoyed the help of Elinor Oozeva, Eva Tungiyen, and Willis Walunga, from Gambell, who expertly transcribed tapes for me.

In Fairbanks, I very much appreciated the welcome, generosity, and linguistic advice of Steven Jacobson, Larry Kaplan, Jeff Leer, and Irene Reed of the Alaska Native Language Center of the University of Alaska. I am most grateful to Michael Krauss, who kindly directed me to the relevant materials in the ANLC library, and to him and his family for putting me up at their house during my two stays in Fairbanks. I also thank Linda Badten of Fairbanks for her comments and corrections of the first Eskimo traditional story I recorded and for information on clan names.

In Nome, I am grateful to Roy Iutzi-Mitchell from Northwest Community College for his hospitality, his advice, and many helpful discussions. I thank Clarence Irrigoo for lending me cassette tapes of Eskimo radio programs from the Soviet Far East and for information on native religion, and Mary Alexander, formerly of Kawerak, Inc., Bering Strait Native Corporation, for showing me some of the text collections of the Eskimo Heritage Project. I am thankful to John and Debbie Pitney, Pastors at the Nome Methodist Church, for providing me with accommodations in Nome. I am most grateful to Lucille Barnes, a volunteer at the Church, who was kind and helpful in many ways. Her listening to me during my initial and often frustrating attempts at analysis of data was an encouragement to me. I also thank Harry and Evelyn Koozaata of Nome for their hospitality.

In Savoonga, I am grateful for the hospitality of Ora Golodgergen, and of Sigurd Kristiansen, Pastor at the Savoonga Presbyterian Church, and his family. In

Gambell, I am grateful for the hospitality provided by Tracy Tungiyán, at whose house I stayed, and for the opportunity to visit and discuss my work with the following native speakers: Susan and Elmer Campbell, Jerry and Eva Tungiyán, Branson and Edith Tungiyán, and Willis and Nancy Walunga. I am indebted to David C. Shinen, the Summer Institute of Linguistics translator in Gambell, for providing me with Yupik texts and for helpful advice.

I remember the friendly and interested welcome I received in the schools of Savoonga by Rudy Howard, Principal of the Savoonga Schools; George Noongwook, who let me sit in in his Yupik literacy class; Edward Tennant, bilingual education consultant for the Bering Strait School District; and the class of Karen Iya. In Gambell, I thank Anders Apassingok, director of the St. Lawrence Island Bilingual Education Center, for introducing me to his staff, and in particular I thank all the Elementary school teachers and bilingual aides of Gambell in whose classes I was so warmly invited to listen and talk.

I would also like to thank the following native speakers, whose remarks or comments were helpful while I was in the field: in Nome, Linda Golodergén, June Martin, and Caleb Pungowiyi; in Savoonga, Christine Alowa, Abby Seppilu, and Dorothy Waghiyi; and in Gambell, Roger and Norma Silook, and Grace Siwooko.

I thank my dissertation committee for their patience and guidance: Anthony C. Woodbury (Chair), Carl L. Baker, John J. McCarthy, Winfred P. Lehmann, and Joel F. Sherzer. I am grateful to Anthony Woodbury, not only for his critical and enlightening comments on many drafts of this work, but also for introducing me to Eskimo linguistics, a field that he made challenging and fascinating. I also benefited from discussions with Maria Bittner, Ian Hancock, Robert Harms, Irene Heim, Dell Hymes, Gui-Sun Moon, Jerrold Sadock, Suzanne Scollon, and Judith Shulimson. I am grateful to Kostya Gurevich, who helped me with my Russian and translated some Russian materials for me.

I owe a large intellectual debt to those theoreticians of Eskimo morphosyntax who helped shape my views on this subject: Knut Bergsland, Michael Fortescue, Jerrold Sadock, and Anthony C. Woodbury. This study also owes a great deal to the pioneering describers of Central Siberian Yupik: G. A. Menovshchikov, N. M. Emel'janova, E. S. Rubtsova, and N. B. Vakhtin in Russia, and Michael E. Krauss and Steven A. Jacobson in Alaska.

I am most grateful to Shobhana Lakshmi Chelliah, my wife, for her comments, support, and continuous encouragement, and to my parents, whose unflinching support and encouragement started long before the actual writing of this work.

I am grateful for the generous support that my fieldwork has been given through a National Science Foundation grant to the University of Texas (1985). This material is based upon work supported by the NSF under Grant BNS-8418256. Any opinions, findings, and conclusions and recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the National Science Foundation.

Since the research upon which this work is based predates the going out of existence of the U.S.S.R., I have deemed it unnecessary to replace "Soviet Union" by "the former Soviet Union," and to replace "U.S.S.R." by "Commonwealth of Independent States," especially in view of the fact that as of this writing, a permanent name for what was the Soviet Far East has not been decided.

WILLEM J. DE REUSE
1992

Introduction

The purpose of this study is (1) to provide a description of the verbal derivational suffixation, postinflectional derivation, enclitics, and particles of the Central Siberian Yupik Eskimo language as spoken on St. Lawrence Island, Alaska, and on the coast of Chukotka, U.S.S.R.; (2) to show how these elements participate in a network of four tightly knit grammatical subsystems: (a) verbal derivational suffixation, (b) discourse enclitics, (c) inflectional verb moods, and (d) adverbial and conjunctive particles borrowed from Chukchi, a neighboring Paleo-Siberian language; (3) to present some of the implications of the relationships among these subsystems for the theory of autolexical syntax and for the theory of language change, in particular concerning contact-induced morphological and syntactic change in a polysynthetic language; and (4) to document the history and sociolinguistics of grammatical and lexical influence of Chukchi on Eskimo in the Bering Sea area.

1.1. The Siberian Yupik Languages and Central Siberian Yupik (CSY)

The Eskimo branch of the Eskimo-Aleut language family can be divided into two subgroups: Inuit-Inupiaq and Yupik. Inuit-Inupiaq is a group of closely related varieties which form a dialect chain, extending from eastern Greenland over the Canadian Arctic to northern Alaska and southward to the northern and eastern shores of Norton Sound. Yupik is spoken south of the Inuit-Inupiaq area in southwestern Alaska, on the south coast of Alaska eastward as far as Prince William Sound, on St. Lawrence Island (SLI), and in a few villages on the coast of Chukchi Peninsula in the Soviet Far East (SFE) (Woodbury 1984:49).

Five mutually unintelligible languages can be distinguished within the Yupik subgroup of Eskimo: Sireniki and Nauyas, both spoken exclusively on the Soviet mainland; Central Siberian Yupik (CSY), the language treated in this study, spoken on some points of the Chukchi Peninsula in the Soviet Far East and on St. Lawrence Island, Alaska; Central Alaskan Yupik (CAY), in southwestern Alaska; and Pacific Yupik or Alutiiq, on the southern coast of Alaska, including Alaska Peninsula and Kodiak Island (Woodbury 1984:5-12).

On St. Lawrence Island, the CSY language is often called *Yupik* or *Yupigestun*, also "Yuit" (CSY *yuget* 'people') in older ethnographic literature

(Hughes 1984:259). For many older speakers, the preferred and correct name for the language is not *Yupik*, but rather *Akuzipik*, literally 'original speech'. The linguists' appellation "Siberian Yupik" is not correct in the sense that CSY is spoken in the SFE, rather than what in contemporary Russian is considered to be Siberia proper. The term "Siberian" is also not liked by some speakers, since St. Lawrence Islanders had, until very recently, no connections with the U.S.S.R. and are U.S. citizens. The term *Masingkestun*, including the Chaplinski (SFE) variety of CSY, the Sirenikski language, and maybe also Naukanski, is occasionally used, but not generally known.

There are presently two permanent villages on St. Lawrence Island. Gambell (CSY *Sivuqaq*), named after the missionary V. C. Gambell (arrived on SLI in 1894, died in 1898), is located on a gravel spit near Northwest Cape, and has been a place of habitation for several thousand years. Its location is a strategic one for marine mammal hunting as well as for trips to the Chukotka mainland. On a clear day, the mountains on the other side of the dateline, forty-two miles away, can clearly be seen. The modern village of Gambell is the result of the consolidation of several older villages on the same site. The other village, Savoonga (CSY *Sivungaq*), is located on North Cape, in the center of the island, on terrain of volcanic ash and mud. It became a permanent settlement in 1917, having started as a reindeer herders' camp a few years earlier. It was settled by people from Gambell, with later additions from the SFE.

The population of St. Lawrence Island stays in these two villages mainly during the winter. During the spring, trips are undertaken by the people of Savoonga to their whaling sites, since the migration path of whales misses the village. Throughout most of the summer, many of the villagers live in fishing camps spread over the whole island. A proportion of the St. Lawrence Islanders emigrates to the Alaskan mainland, in particular to Nome, which has more than a hundred residents from SLI, but also to other areas in Alaska, and to the "Lower 48."

The population of SLI was approximately 1,200 in 1985, of which more than 1,100 were Eskimo, the remainder being nonnative teachers, school administrators, missionaries and their families, as well as a few nonnatives with native spouses. The Eskimo population per village was probably slightly over 500 for Gambell and slightly over 550 for Savoonga. Savoonga surpassed Gambell in population in the early seventies (Krauss 1975:43-44, 1979:823; Apassingok et al. 1985:xx). Actually, the population of the island was perhaps as high as 2,000 at one time, and there were many villages spread over the island, representing distinct clans and presumably also distinct dialects. There is archaeological and historical evidence that many of the abandoned sites on the island were inhabited until a catastrophic famine occurred in the winter of 1878-79 (Collins 1937; Geist 1936). This famine wiped out

more than three-fourths of the original population, and by the end of the nineteenth century, only the villages of what is now Gambell (330 inhabitants in 1896) and Powwoiliak (CSY *Pugughileq*, 35 inhabitants in 1896; since 1950 no longer a permanent settlement) were still inhabited (Hughes 1960:4, 13-14; Krauss 1975:43).

All adult native permanent residents of SLI are able to speak CSY. Dialectal variation is very slight and probably diminishing. There are more clans represented in Gambell, and it is therefore to be expected that more of the original dialectal variation is preserved there; however, several clans in Savoonga have come from Siberia in this century, and these have introduced more dialectal variation. It is not clear whether one village is linguistically more conservative than the other, since this is a point speakers in both villages often disagree on. I heard one Gambell speaker say that Savoonga speakers pronounce English loanwords with a more pronounced Eskimo accent, but I do not know how general this statement is. At any rate, the language is very much alive for all age groups; young children still enter kindergarten not knowing any English, and some children of nonnative English-speaking teachers and missionaries have learned some CSY in order to communicate with their schoolmates.

Bilingual education began in the SLI schools in 1972, and there is now a generation of schoolchildren who can read and write in the language (Krauss 1980:47). CSY-speaking teacher's aides and "locally recognized experts" teach pupils CSY for about an hour a day. There are also evening classes for adults who wish to learn to read CSY.

Besides the school, another domain of SLI life where CSY and English competence is kept up side by side is religion. In Savoonga, there is a Presbyterian church with a minister in residence year-round. During the services, prayers and songs are conducted either in English or in CSY, and the minister's sermons are often translated by lay leaders in CSY; there is a Bible translator team in Gambell under the direction of David and Marilene Shinen of the Summer Institute of Linguistics. There is also a small Seventh-Day Adventist community in Savoonga and Gambell. CSY speakers residing in Nome also attend Presbyterian or Methodist services there, with the same pattern of language use as in the Savoonga church services.

The CSY-speaking children's knowledge of English is constantly expanding, primarily under the influence of TV and the videorecorder, and there might be some reduction of CSY use among teenagers. Rarer words and technical terminology are no longer known to these young people, a fact deplored by elderly speakers and native teachers. Families speaking English rather than Yupik to their children exist, at least in Gambell, but they are so few that some people can list them by name.

Considering that SLI is so solidly Eskimo speaking, CSY-English bilingualism is surprisingly widespread, as compared to other Eskimo communities in Alaska.

The ability to speak both languages well is a matter of pride to some extent, and even the oldest generation (people in their eighties) has some degree of fluency, and by 1985 there were only a few monolingual adult speakers of CSY on SLI. Still, the large majority of CSY speakers are definitely CSY-dominant and speak English with some recognizable interference from CSY.

Soviet radio programs in Eskimo are occasionally listened to with some interest, but are not well understood, mainly because of the large number of Russian loanwords used, but also because two of the three announcers are native speakers of Naukanski, a different Yupik language, and because of the subject matter, which is usually local politics and economy, in particular reindeer herding.

CSY speakers from SLI have little exposure to other native languages. Inupiaq and CAY are heard, primarily in Nome, and the similarity of CSY with these is recognized, but their intelligibility is considered extremely low. The oldest generation of speakers remembers a few Sireniki and Chukchi words learned from visitors from Chukotka in the beginning of this century, and also a few Lappish words learned from the Lapps who came to Savoonga to help the St. Lawrence Islanders set up a reindeer-herding industry in 1900.

In the U.S.S.R., the terms "Asiatic Eskimo" or "Yuit" are sometimes used as a cover term for all Soviet Eskimo languages, but they can also refer to CSY, since it is taken as the base for the standard form of literary Eskimo there. Following favorable language policies starting as early as 1932, there have also been unfavorable language and relocation policies, and as a result of the latter the Eskimo-speaking population of the U.S.S.R. appears to be diminishing fast. The territory of Asiatic Eskimo speakers over Chukotka was much wider than it is now; in the past it has lost ground to the Chukchi. The original distribution of Asiatic Eskimo and its relationships with the Chukchi are discussed in chapter 5.

CSY is generally called the Chaplinski dialect in the Soviet Union (after the village of Chaplino [CSY *Ungaziq*, closed since 1958]). The ethnically Chaplinski population is perhaps 900, with at most 400 speakers, and is concentrated since 1958 in the villages of New Chaplino and Sireniki (Krauss 1985:4). Since 1917, there have also been some speakers in Uel'kal' on the Anadyr Gulf and since 1924 on Wrangell Island in the Chukchi Sea (Woodbury 1984:51; Michael Krauss, personal communication). CSY has been used in radio programs, pedagogical publications, and even literary productions other than native folklore. It is virtually identical with CSY as spoken on SLI, and exhibits about the same amount of dialectal variation. It does have a few phonetic, phonological, morphological, syntactic, and lexical peculiarities differentiating it from CSY on SLI. Undoubtedly, many of these

peculiarities are fairly recent in origin and possibly arose under Russian and Chukchi influence, which has strongly prevailed in this century.

No children now speak Chaplinski. This situation is due partly to assimilationist and "security" policies of the Cold War, resulting in the closure of Chaplino and Naukan and their relocation and consolidation farther from the points of possible contact with Alaskan Eskimos. At present, CSY speakers are everywhere a minority in Chukotka, and Eskimos are a majority only in New Chaplino. Eskimo nationalism is discouraged, and intermarriage with non-Eskimo speakers and economic and political integration within the Soviet whole is encouraged (Krauss 1980:47-48; Hughes 1984:258-59).

This political situation has even more drastically affected the other Soviet Eskimo languages. Naukanski was spoken in the village of Naukan (CSY *Nevuqaq*) near East Cape until 1958, when the whole village was evacuated and its speakers relocated in other villages down the coast (Krauss 1980:47-48; Chichlo 1981). Krauss (1985:4, personal communication, 1992) estimates the total population to be perhaps 350 and the number of Naukanski speakers 75 by their own count, of whom none are children. Naukanski is linguistically intermediate between CSY and CAY, and mutual intelligibility is perhaps not higher with CSY than with CAY (Krauss 1980:9-10, 1985a:182-88, personal communication).

Sireniskii, originally spoken in the villages of Sireniki (CSY *Sighineq* or *Sighineq*) and Imtuk (CSY *Imtuk*), to the west of the Chaplinski area, is highly divergent from any other Yupik language. It is practically extinct, since there were only two elderly speakers in 1980; the descendants of Sireniskii speakers now speak Chaplinski, Chukchi, or Russian (Vakhtin 1984:70; Krauss 1985:4).

Imaklikski, the dialect of Bering Strait Inupiaq spoken on Big Diomed Island, U.S.S.R. (CSY *Imaqliq*), was identical to Bering Strait Inupiaq as spoken on Little Diomed Island, Alaska, only about three miles east of Big Diomed. The inhabitants of Big Diomed were moved to Naukan in 1948, but by that time the Inupiaq inhabitants of Big Diomed, with the exception of one family, had moved to Little Diomed. The Bering Strait Inupiat remaining in the U.S.S.R merged with the ethnic Naukanski, and the language is now practically extinct there (Michael Krauss, personal communication 1986).

1.2. Previous Work on Siberian Eskimo and Chukotan

The main grammatical works on CSY are Menovshchikov (1962, 1967), Emel'janova (1982), Krauss (1975, 1985a), Jacobson (1979, 1985:26-29, 1990a), and Vakhtin (1987). The first work, a description of the Chaplinski variety of CSY,

is an extensive grammar, but it mainly emphasizes phonology and morphology, and there is no section on syntax. Its analysis of the phonology and morphology is incomplete and not always satisfactory. Emel'janova's 1982 work is an account on Chaplinski verb classes, lexicography, and some postbases, elaborating on some of the points not treated in Menovshchikov's 1967 work. Krauss (1975) is a definitive treatment of SLI CSY phonology and orthography, which is complemented by the prosodic notes in Krauss (1985a) and by the description of prosody in Jacobson (1985). Jacobson (1979) is a grammatical sketch of SLI morphophonemics, inflectional morphology, demonstratives, and a few postbases; and Jacobson (1990a) is a pedagogical grammar of St. Lawrence Island Yupik with copious exercises, and adds to the information on inflectional and postbase morphology given in the 1979 sketch. Jacobson (1990) is a detailed comparison of CSY with Central Alaskan Yupik, updating the comparison of these two languages given at the end of his 1979 sketch. Jacobson (1990b) is an introduction to the Cyrillic system for writing CSY. More discussion of the Soviet work on CSY grammar is in chapter 2, subsection 2.1.1.

Collections of texts for the SFE have existed for quite some time (Bogoras 1913; Bogoraz 1949), the most reliable and interesting from an ethnographic point of view being Rubtsova (1954); the Russian of this collection has been translated into French (Sergeeva and Rubtsova 1988). The latest text collection is Menovshchikov (1988a). In the Soviet Union, a large number of pedagogical materials have been published, the latest of which are a textbook of grammar with exercises (Menovshchikov and Vakhtin 1983), a reprint of an elementary reader (Ajnana and Nakazik 1987), a short school dictionary (Menovshchikov 1988), and a textbook for studying and expanding CSY vocabulary (Vakhtin and Emel'janova 1988). A complete survey of the extensive Soviet literature on CSY is given in Krauss (1976). On the Alaskan side, the publication of texts started later, but is in a more accurate orthography than the Cyrillic one used by Soviet materials. Such texts include historical or ethnographic accounts (Angi et al. 1975; Apassingok et al. 1985, 1987, 1989; Irrigoo et al. 1978; Otayahak 1973), a cookbook (Oozevaseuk 1973), traditional tales or legends (Pungowiwi and Gologergen 1975; Slwooko 1977, 1977a, 1979; Slwooko and Kulukhon 1975; Slwooko et al. 1975), and a large number of children's primers, readers, and materials for learning to spell published by the Alaska Native Language Center, University of Alaska, Fairbanks, the Nome Agency Bilingual Education Resource Center, Bureau of Indian Affairs, Nome, or the St. Lawrence Island Bilingual Education Center, Bering Strait School District, Gambell. Biblical and religious works published in CSY by the Wycliffe Bible Translators in Gambell include the Gospel of Mark (1974), the first letter of Paul to the Corinthians

(1985), and a book of religious hymns, some translated from English but mostly composed by the native speakers themselves (1983).

As far as dictionaries are concerned, there exist several Russian works, the most extensive being Rubtsova (1971). But the most reliable works are two Eskimo-English dictionaries for SLI CSY: Badten et al. (1987) and Silook et al. (1983). The first work, edited by Steven Jacobson, had been circulating in an earlier unpublished version since 1983, and is written in a more consistent and reliable orthography than any of its Russian predecessors. It includes morphophonemic information, a postbase dictionary, an enclitic list, and an English-Yupik index. Silook et al. (1983) is written in the same orthography as Badten et al. (1987), contains a much smaller number of words and no postbases, and does not give any explicit morphophonemic information. An interesting feature is its use of native language definitions of Eskimo words. Complementing these two works are two high-quality productions of the St. Lawrence Island Bilingual Program: Walunga and Apassingok (1988), a CSY-CSY monolingual dictionary of less common terms, and Walunga (1987), a curriculum resource manual with specialized terminology arranged by topic.

Other works on CSY are listed and discussed in Vdovin (1954) and Krauss (1976, 1979). Krauss (1985:17-20) is a detailed history of the study of CSY prosody. Overviews of Menovshchikov's extensive contributions to Soviet Eskimo linguistics are given by Krauss (1982) and Vakhtin (1982).

When quoting from the three Soviet Eskimo languages other than CSY, I have mainly used the following reference works, which each contain a grammar and a lexicon: Menovshchikov (1964) for Sireniksi, Menovshchikov (1975) for Naukanski, and Menovshchikov (1980) for Imakliksi (Big Diomed Inupiaq).

The reference works on Chukotan are few. Skorik's 1961 and 1977 works are the standard references on Chukchi, but Bogoras (1922), even though written in an overdifferentiating and somewhat erratic phonetic transcription, is still useful for research on Chukchi particles and syntax. Nedjalkov (1976) is a study of Chukchi verbal valence and sentence structure. Zhukova (1972) is the reference work on Koryak phonology and morphology. In my research on Chukotan lexical influences on Eskimo, I used the standard Soviet dictionaries for Chukchi (Moll and Inénlikéj 1957) and for Koryak (Zhukova 1967). These are mainly pedagogical and not extensive, and therefore were complemented by lexical data found in collections of Chukchi and Koryak texts with interlinear translations (Bogoras 1910, 1917; Bogoraz 1900, 1949).

The syntactic influence of Chukchi on CSY was first noted by Bogoras ([1901]:53-55, 71, 81b) and Jakobson (1942:617-18). Later, nothing of significance was published beyond the often repeated observation of Menovshchikov (1967:220,

229, 269, 1969:124-29, 1986:69-70) that particles of Chukchi origin have provided CSY with analytic synonyms of verbal derivational suffixes. Comrie (1981:257) stated that the borrowing of particles has caused in CSY a shift in syntactic typology from nonfinite to finite constructions, but, as will be seen in chapter 6, there is actually no evidence for this.

1.3. Scientific Significance

This study of CSY morphology and syntax makes contributions to three major areas:

1. the descriptive and comparative-historical study of the morphology of the Eskimo-Aleut language family and its subfamilies;
2. the theory of morphology, as applied to a comparatively little-known language; and
3. the study of lexical borrowing, and of syntactic interference and change.

The first contribution is valuable in that there are considerable gaps in the description of CSY morphology. More detailed descriptions of areas of CSY morphology that have so far been neglected will be useful in the reconstruction of Proto-Eskimo morphology in particular and in the reconstruction of Proto-Eskimo-Aleut in the long range.

Concerning number 2, the recognized morphological peculiarities of Eskimo-Aleut have had an impact on theoretical morphology, albeit a rather limited one since the present morphological theories are largely based on data from limited sets of languages or very limited data from little-known languages. In this study I apply the theory of autolexical syntax (Sadock 1985, 1991) to a variety of CSY morphological data, and I show that these data are better described in this partially nonhierarchical theory than in a purely hierarchical theory.

With respect to number 3, we know that CSY has developed interesting syntactic differences from other Yupik languages due to extensive contacts in prehistoric and historic times with Chukchi. Patterns of syntactic interference have arisen, and are of particular interest, since studies of syntactic influences on a highly inflected and also polysynthetic language like Eskimo do not exist. They are also of considerable interest for the study of comparative-historical and areal linguistics and pidginization.

This study is also of lexicographic interest, since the lists of postbases, enclitics, and Chukchi loanwords provided in it are much more extensive than any occurring in the published literature.

1.4. Data and Field Procedure

The data for this study can be classified as follows:

1. Texts
 - (a) texts collected and analyzed by me
 - (b) published or unpublished texts not collected by the writer, but analyzed by me
2. Elicited data
3. Existing grammatical descriptions and dictionaries

I carried out fieldwork with native speakers during two field trips to Nome, Alaska, from March 18th to May 1st, 1985, and from November 4th to December 20th, 1985. During the second trip, two field trips were also made to the CSY villages on SLI, Alaska: Savoonga (November 18th to November 30th) and Gambell (December 11th to December 14th).

The texts gathered during these trips include dialogues between adults (autobiographical or on everyday matters), dialogues between a mother and her young children, dialogues between young children, monologues (autobiographical or on everyday matters), short songs, and traditional tales (CSY *ungipaghaatet*, singular *ungipaghaan*). All these were recorded on tape, and transcribed and translated with the help of native speakers. A list of the texts analyzed and recorded by me, and therefore used most extensively in this study, is given in the table. In the topic column, CSY titles are underlined; the majority of *ungipaghaatet* do not have titles, however. English titles were provided in English by my consultants, and have no ethnological significance.

Notebook number: pages	Date (all 1985) Place	Speaker(s)	Topic
1:2-21	03/28 Nome	Gordon Irrigoo	Autobiographical monologue: hunting seals.
1:22-30	04/01 Nome	Gordon Irrigoo	Monologue: Eskimo singing.
1:32-40	04/02 Nome	Gordon Irrigoo	Monologue: reminiscing on contents of a children's book, <i>Dumbo the Elephant</i> .
1:41-44, 45-50	04/12 Nome	Gordon Irrigoo	Autobiographical monologue: the morning of April 12th.
1:51-60	04/16 Nome	Gordon Irrigoo	Autobiographical monologue: fishing for bullheads.
1:62-70	04/24 Nome	Gordon Irrigoo	Monologue: comments on cassette tape recordings of the Soviet radio in Eskimo.
1:71-80 4:70-71	04/25 Nome	Gordon Irrigoo	Autobiographical monologue: egg-hunting with Harry Koozaata.
2:1-9	04/02 Nome	Timothy Gologergen	Synopsis of an <i>ungipaghaan</i> (a little girl is abducted by a giant and saved by a fox).
2:11-20	04/04 Nome	Timothy Gologergen	Autobiographical monologue: what I did today.
5:2-23	04/15 Nome	Della Waghiyi	<i>Ungipaghaan: Qatii hik</i> (onomatopoeic for swallowing; an orphan boy magically halts a famine).
5:26-35, 37-40, 68-74	04/24 Nome	Mary Ann, Ronnie, and Regina Wongittilin	Conversations between mother (M.A.W.) and children, drawing, playing with modeling clay, and answering questions about stories.

5:45-55	04/24 Nome	Mary Ann Wongittilin	Fragment of an <i>ungipaghaan</i> (from the same story as 2:1-9, above).
5:56-67	04/15 Nome	Della and John Waghiyi	Dialogue on preparing for the whaling season.
5:75-76	04-25 Nome	John Waghiyi	Synopsis of an <i>ungipaghaan</i> , with song (a raven jumps into a fire).
5:76-77	04/25 Nome	Della Waghiyi	Children's jingle with accompanying gestures about meatballs.
7:1-19	04/25 Nome	Della Waghiyi	<i>Ungipaghaan</i> (a man stops storms by killing a little storm bird).
7:28-7	11/14 Nome	John Waghiyi	<i>Ungipaghaan</i> (Raven and Wolf slide down a slope).
7:8-33	11/14 Nome	Della Waghiyi	<i>Ungipaghaan</i> : <i>Mitiika</i> (<i>Mitiika</i> 's husband, a raven, is tricked by his grandchildren).
8:49-54, 60-78	11/25 Savoonga	Walter and Mary Ann Wongittilin	Dialogue: M.A.W. interviews her great-uncle (W.W.) about his life.

In addition to the nineteen texts above, I also taped historical accounts and *ungipaghaatet* from Jim Toolie in Savoonga (11/24, 25/1985; tapes 43 and 44), and from Nick Wongittilin in Nome (12/3, 4/1985; tapes 52 and 53) totaling 232 pages transcribed by native speakers in Gambell. A translation of these has not yet been obtained. Therefore, they have not yet been analyzed, and have only been scanned for interesting sequences of postbases (chapter 2) and interesting postinflectional postbases (chapter 3).

The text data not collected by me include autobiographical and historical accounts and a large number of *ungipaghaatet*. A list of the grammatical, textual, and lexical material not gathered by me, but consulted and often quoted, appears at the beginning of the References.

The elicited data include conversational sentences translated from English sentences, grammatical judgments of sentences constructed by me, discussions of lexical items and grammatical constructions found either in texts or in the grammatical and lexicographic literature, and texts.

My analysis is thus based on texts recorded by me, as well as on texts from previously published and unpublished sources transcribed and edited by native speakers. Texts not recorded and transcribed by me have been used with caution, since it is not clear how much editing was done between the original recordings and the written versions. I have used such texts mainly in order to gather lexical information, since it is somewhat less likely to be modified by the editing process.

The Soviet grammars, texts, and dictionaries have been used extensively as sources of lexical, morphological, and syntactic material. They are generally less reliable than the existing SLI sources, due to the fact that the Cyrillic orthography marks vowel length only occasionally, and they therefore have been used with caution. In this partly historically oriented study, the use of Soviet sources is crucial for the study of the evolution of morphological and syntactic change due to the languages CSY was or is in contact with in the SFE (other Eskimo languages, Chukchi, Koryak, Russian, and English). Morphological analyses of forms in the Soviet literature have not been considered for my own analyses, since they are quite often unreliable. I also listened to three cassette tapes of the Soviet Eskimo radio broadcast from Anadyr', Chukotka, recorded by Clarence Irrigoo in Gambell in the early seventies.

As far as methods of elicitation are concerned, it was often preferable not to ask consultants to judge the acceptability of forms constructed out of context, since this process is unproductive and misleading. Indeed, some speakers will tend to accept nearly anything, whereas others will reject perfectly well-formed sentences for pragmatic reasons. A more reliable technique included asking the consultant to make substitutions within accepted forms, and then asking him or her to paraphrase the resulting forms. When attested forms are presented to consultants as part of the texts in which they originally occurred, the added context aids them in producing new and related forms and the linguist in interpreting meaning. For certain grammatical systems, this is the only possible elicitation method. For example, it is always pointless to ask about postbase meanings, since these are never recognized in isolation as meaningful elements of a word. Therefore, one has to present forms of the same word without the postbase to be investigated, or with other postbases, and have the new words translated in order to reach an approximation of the meaning of the investigated element.

Another elicitation technique consists in obtaining CSY utterances via translation from English. This is the least reliable elicitation method, since interference from English often results, and it is often more informative on a consultant's techniques of rendering English into CSY than on the language itself. I have asked for translations of short and natural conversational exchanges rather than

for individual sentences. In such conversational contexts, interference from English can be kept to a minimum.

1.5. Outline of Chapters

Chapter 2 is a treatment of derivational suffixes that derive verbs from other verbs (called VV postbases). There are in CSY approximately 387 VV postbases. Only about half of these are fully productive. Only VV postbases are considered in this study because they are the most likely to interact with particles borrowed from Chukchi. I also provide a survey of the more recent literature on postbase issues, including a critique of Soviet work. The main contribution of this chapter is a new approach to the problem of postbase ordering and its relationship to the matters of productivity and semantic scope. I argue for the appropriateness of an autolexical model in this approach. The chapter also contains a reference list and classification of all VV postbases identified so far, including morphophonemic and syntactic information and explanations of meanings, and a partial description of the order of VV postbases.

Chapter 3 deals with postinflectional derivational morphology. Within Yupik, CSY is unique in that it has a number of productive postbases that occur not only on particles but also after nouns and demonstratives inflected for adverbial cases; their function is adverbial modification. From a formal point of view, these postbases are a set closely related to a set of VV postbases discussed in chapter 2. A list and description of all postinflectional postbases is provided, and implications for the theories of autolexical syntax and lexical phonology are discussed.

Chapter 4 deals with the CSY enclitics. These are particles phonologically bound to a preceding word, with coordinating or discourse marking functions. It appears that, in addition to enclitics cognate to the ones existing in other Eskimo languages, CSY has borrowed two enclitics from the neighboring Chukchi language. A list and description of the individual enclitics is given, and sections on the phonology, the relative order of enclitics, and the implications for autolexical syntax are provided.

Chapter 5, on the Bering Sea as a linguistic area, is disconnected from the preceding chapters in that it is not descriptive or theoretical. However, it is convenient to locate it at this point of my study because it provides the historical background necessary for interpreting the evidence for Chukchi influence on the grammatical systems described in chapters 2 through 4. The interpretation of the Chukchi influence itself will then be provided in chapter 6. In documenting the long history of contact and trade relations between Chukchi and Siberian Eskimo, I

provide ethnographic, onomastic, toponymic, and archaeological evidence that Chukchi and Eskimo were closely connected culturally and economically, resulting in extensive Chukchi and Eskimo bilingualism in the Eskimo communities. I also provide a historical survey of simplified language forms in the Bering Sea area, discussing the influence of Russian and Western exploration, trading, and whaling in the nineteenth century and of modern language policies. I also give accounts of U.S. or European whalers' ships' jargon and a survey of the historical and linguistic evidence for a Chukchi-Eskimo jargon spoken on the Chukotka coast. This evidence is important, since I show in the next chapter how such a jargon might have influenced CSY itself.

Chapter 6 is on the influence of Chukchi on CSY, and starts with a dialectological discussion showing there is very little evidence for Chukotan influence other than Chukchi on CSY. A discussion of loans from Chukchi to CSY and from CSY to Chukchi is provided. A syntactic problem peculiar to CSY (and also to Naukanski and Sirenikski) is posed by the presence in its lexicon of an unusually large number of uninflected particles, generally adverbial or connective in meaning, which are borrowed from Chukchi. The number of uninflected particles is much smaller in Eskimo languages that have not borrowed from Chukchi. Some common examples are *amen* 'then'; *elngaatal* 'extra'; *luuraq* 'might', 'in case'; *qenwat* 'finally'; *repall* 'even', 'so much so that'; *wanlegi* 'more and more'; *wetku* 'when'. I give a list and index of particles from Chukchi, with etymologies, corresponding forms in other Eskimo languages of the SFE (Sirenikski, Naukanski, and Imaklikski) if applicable, and with morphological and syntactic notes.

I argue that CSY's richness in particles must be explained in external historical terms. There is anecdotal evidence for the existence, until the end of the nineteenth century, of a Chukchi-based trade jargon in the western Bering Straits. This jargon had as its superstructure a particle-rich, morphologically simplified version of Chukchi, into which speakers of the various Siberian Eskimo languages (CSY, Naukanski, Sirenikski) would insert lexical items from their own Eskimo languages and, conversely, the particle superstructure would come to be used in the Siberian Eskimo languages themselves. This relatively stable superstructure accounts for the fact that even though CSY, Naukanski, and Sirenikski are mutually unintelligible, all three acquired virtually the same Chukchi particle corpus long after diverging from one another.

The evidence for a jargon origin of these particles also includes cases of morphological convergence and negative attitudes of present-day speakers toward many of the particles.

A question of both theoretical and descriptive interest is the investigation of the degree to which these particles have caused CSY grammar to be more analytic or, in other words, have simplified the morphology by playing its role in the grammar.

The inflectional-mood verb morphology and enclitics have not been reduced by the particles, since they are as complex as in the Alaskan Yupik languages. However, in the SFE, it appears that one connective particle is in the process of replacing a native Eskimo connective enclitic.

One would also expect the number of postbases, in particular the number of VV postbases, to be reduced, since the meaning and function of such postbases is often similar to the meaning and function of the particles. For example, there does not seem to be a CSY postbase comparable in meaning to the CAY postbase *-(u)cite-* 'to V in place of, instead of', but there are several CSY particles (borrowed from Chukchi with precisely that meaning: *emta* 'for a change, instead', *puuru* 'instead'. It appears, then, that fewer productive postbases are used in CSY than in Central Alaskan Yupik, for example. In a few cases, one can even show that the existence of a particle must have caused the disappearance of a productive postbase in CSY, since the disappeared CSY postbase still shows up only in nonproductive combinations or in archaic lines of tales. However, such a functional trade-off is not widespread, and it is much more often the case that a particle has not led to postbase loss. Rather, a particle and a synonymous or near-synonymous postbase can co-occur, with semantic specializations or reinforcement of the postbase by the particle. There is never any mutual exclusiveness of a particle and a postbase.

In CSY there is a recent tendency toward reducing the synonymy of postbases and particles; it occurs in different directions in the SFE and in SLI. In the SFE, there is a stronger tendency toward reducing the number of productive postbases, a process especially advanced in Naukanski. In SLI, there is a tendency toward keeping more postbases and reducing the particles to a smaller but frequent set; the less common particles do not occur in the speech of SLI speakers born after the time relationships with the Chukchi were interrupted.

From a synchronic point of view, the description offered in this study of VV postbases (chapter 2), postinflectional postbases (chapter 3), enclitics (chapter 4), and particles (chapter 6) requires a model of grammar showing the close semantic and structural relationships between these elements. The theory of autolexical syntax, further discussed in chapter 2, subsection 2.1.3, is such a model. The modular approach of autolexical syntax correctly predicts the CSY facts presented in this study: grammatical formatives may have purely morphological, morphosyntactic, or purely syntactic characteristics (Sadock 1991). There is actually a cline going from purely morphological affixes with no syntax, through elements that have both

morphology and are also relevant to the syntax, to purely syntactic elements with no morphology. An argument for the existence of such a cline will be given, showing that the VV postbases, postinflectional postbases, inflectional mood markers, enclitics, and particles can be seen as five points on this cline, going from the "pure" morphological to the "pure" syntactic elements.

From a diachronic point of view, one would expect there to be historical shifts from one point of this cline to another, and these appear to occur. So VV postbases are etymologically related to postinflectional postbases (chapter 3), particles can evolve into enclitics (chapter 4), and VV postbases can be replaced by semantically equivalent independent particles or evolve into mood markers (chapter 6).

1.6. A Sketch of CSY Grammar

This section provides a sketch of the main facts of CSY phonology, orthography, morphophonemics, morphology, and syntax. It has two goals: to introduce the nonspecialist in Eskimo to the structures and terminology necessary for an understanding of the technical discussions and example sentences in the chapters to follow and to point out to the linguist specializing in Eskimo some of the structures and terminology unique to CSY. Consequently, the nonspecialist in Eskimo will benefit from a more balanced presentation by skipping over the paragraphs on phenomena identified as unique to CSY.

The morphophonemic and grammatical terminology used in this study is the same as in Woodbury (1981). The main grammatical definitions, as applied to CSY, are also found in Jacobson (1979, 1990a), the differences from Woodbury's terminology being the following:

Jacobson (1979)	Woodbury (1981) and this work
Connective moods	Oblique moods
Quantifier	Independent Relative (IR)
Subordinative mood	Appositional mood (APO)

1.6.1. Phonology and Orthography

Table 1 charts the taxonomic phonemes of CSY. Table 2 provides the orthography used for writing the SLI variety of CSY, based on Krauss (1975), where details on phonetic detail, allophones, distribution, and dialectal variation are given. This work also contains an informative account of the Cyrillic spelling systems in use

in the Soviet Union. Also, CSY words from the SFE are respelled in the SLI orthography.

Within the word, clusters of two different consonants occur, and since both elements of such clusters are often voiceless throughout, there are conventions for simplifying or "undoubling" voiceless clusters containing one or two polygraphs. Thus *gg, ghh, ghhw, mm, nn, ngn, ngngw, ll*, and *rr* can become *g, gh, ghw, m, n, ng, ngw, l*, and *r*, respectively, in certain clusters. The rules for "undoubling" presented here differ very slightly from the rules in Krauss (1975:67-68) and in Shinen (1976:33-34), but should be considered the standard system, since they were adopted in Silook et al. (1983) and Badten et al. (1987).

Rule 1: Whenever a voiceless polygraph clusters with a simple voiceless consonant, undouble the polygraph. It should be noted that *wh* counts as a simple consonant, on a par with *p, t, k, q, f, or s* (and not as a polygraph).

Rule 2: Whenever two voiceless polygraphs cluster, undouble the second one, unless it happens to be *ll*, in which case the first is undoubled.

Nontechnical accounts of CSY orthography and pronunciation occur in Badten and Krauss (1971:1-7; shortened form reprinted in Silook et al. 1983:i-iv), in Shinen (1976), and in Jacobson (1990a:1-8). The alphabetical order used in the lists in this work is the same as the one used in Badten et al. (1987) and slightly different from the one used in Silook et al. (1983); the polygraphs *gg, gh, ghh, ll, mm, nn, ng, ngng, rr*, and *wh* are not alphabetized as separate units. The main peculiarity of CSY alphabetization is that vowel length (i.e., the difference between *a* and *aa, i* and *ii, u* and *uu*) is ignored.

1.6.2. Morphophonemics

When a suffix is added to a word (or to another suffix), a variety of phonological processes of deletion, insertion, and voice or place assimilation can occur at the morpheme boundary. Which particular phonological process is applicable is indicated by boundary symbols used in front of a suffix. These symbols are not predictable from the phonological shape of the suffix itself. Since this work is not primarily concerned with morphophonemics and since the intricacies of the boundaries are explained in Jacobson (1979:5-10, 1990a), suffixes are not quoted with boundary symbols, but are preceded by hyphens, simply indicating that they are bound morphemes. This has been done in all chapters and sections, with the exception of

TABLE 1. The Taxonomic Phonemes of CSY

Consonants:

	Labial	Apical			Velar		Labialized Velar		Laryngeal
		Dental	Retroflex	Palatal	Front	Back	Front	Back	
Stops:	p	t			k	q	k ^w	q ^w	
Fricatives									
Voiced	v	l	r	z y	ʎ	ɣ	ʎ ^w	ɣ ^w	
Voiceless	f	ʈ	R	s	x	χ	x ^w	χ ^w	h
Nasals									
Voiced	m	n			ŋ		ŋ ^w		
Voiceless:	M	N			ɲ		ɲ ^w		

Vowels:

Short vowels

i u
 ə
 a

Long vowels

E u:
 æ

TABLE 2. The Corresponding Graphemes of CSY

Consonants:

	Labial	Apical			Velar		Labialized Velar		Laryngeal
		Dental	Retroflex	Palatal	Front	Back	Front	Back	
Stops:	p	t			k	q	kw	qw	
Fricatives									
Voiced	v	l	r	z y	g	gh	w	ghw	
Voiceless	f	ll	rr	s	gg	ghh	wh	ghhw	h
Nasals									
Voiced	m	n			ng		ngw		
Voiceless:	mm	nn			ngng		ngngw		

Vowels:

Short vowels

i u
e
a

Long vowels

ii uu
aa

the postbase classification of chapter 2, subsection 2.5.3.¹ The morphophonemic boundary symbols used in front of postbases in this postbase classification are the same as the ones explained in Jacobson (1979:5-10, 1990a), but with the modifications of Badten et al. (1987:4-5). The meanings of the symbols used are given below with examples for each. Examples are cited in the following format, which is similar to that used in Woodbury (1981:xvii-xviii):

(example number)	Orthographic representation
	Word-level glosses
	Sentence gloss (source of example)

Sources of examples contain a source abbreviation followed by a hyphen and the relevant page numbers or the notation "pc" (personal communication).

+ (plus sign) simple agglutination without phonological changes (except that base final ...e- disappears before a vowel-initial suffix, a general CSY constraint against sequences of shwa and vowels). Examples with the postbase *+ataghagh-* 'to V more' are:

- (1) pinighataghaghtuq
 pinigh-ataghagh-(t)uq
 be.nice-more.V-IND(3s)
 'it is nicer' (BAb-270)

- (2) aangataghaghtuq
 aange-ataghagh-(t)uq
 be.big-more.V-IND(3s)
 'it is bigger' (BAb-27)

- (minus sign) deletion of a final velar fricative. An example with the postbase *-rruug-* 'ragged N' is:

¹ The definition of postbase (as well as base) is given in subsection 1.6.3.1 of this chapter.

- (3) atkurruuk
 atkug-rruug-Ø
 parka-ragged.N-ABs
 'ragged parka' (BAb-296)

-- (double minus sign) the word-final consonant as well as the preceding vowel are deleted. An example with the postbase --*iqe*- 'to V over a period of time (pejorative)' is:

- (4) qaviqi!
 qavagh-iqe-i
 sleep-V.over.a.period.of.time.(pej.)-OPT(2s)
 'sleep on!' (when actually one should not) (SLb-15)

@ (at sign) points to the special treatment of preceding ...*te*- (which might be deleted [as with the postbase @+*negh*- 'the result of V-ing', example 5], or delete its *e* and assimilate the *t* in manner of articulation to a suffix initial *l*, *ll*, *n*, *r*, or *rr* [as with the postbase @+*naanghit*⁰*e*- 'to not V in the future', example 6]):

- (5) ikighneq
 ikighte-negh-Ø
 open-result.of.V-ing-ABs
 'opening' (BAb-288)
- (6) tuqunnaanghitanka
 tuqute-naanghit⁰*e*-anka
 kill-FUT.NEG-IND(1s-3p)
 'I won't kill them' (BAb-287)

: (colon) with vowel-initial suffixes only: deletion of final ...*gh*- if this is preceded by *a*, *i*, or *u*, so that a long vowel or diphthong results from the adjacency of final short vowel and the initial vowel of the suffix; in CSY, an underlying diphthong changes into a long vowel, according to the chart below, showing the precedence of /i/ over /a/ over /u/:

Second vowel:	i	a	u
First Vowel:	i	ii	ii
	a	ii	aa
	u	ii	aa
			uu

An example is the postbase *:(u)sigh-* 'instrument for V-ing':

- (7) igaasiq
 igagh-(u)sigh-Ø
 write-instrument.for.V-ing-ABs
 'pencil, pen' (BAb-298)

Three other boundary symbols used in Badten et al. (1987) and Jacobson (1990a) have not been used in my classification. % means deletion of final *...gh-* if it is "weak"; most noun final *...gh-* are "weak." The following final fricatives are called "strong" consonants: *...g-*, *...w-*, the *...gh-* preceded by a schwa or by a long vowel, all verb final *...gh-*, and certain noun final *...gh-* written as *...gh** since they are phonologically unpredictable. This boundary only occurs with noun inflectional endings and a few postbases derived from inflectional endings.

One morphophonemic distinction, not systematically marked in Badten et al. (1987), is the underlining of postbase-initial front and back velars of consonant-dropping postbases. This means that when the base-final velar is dropped, the underlined velar consonants assimilate in place of articulation to the deleted consonant (i.e., front velar for front velar and back velar for back velar). This assimilation is predictable for the large majority, but not all, of the consonant-dropping postbases, and is therefore marked in this work. Contrasting pairs are formed by the postbases *-ghqu-* 'to go to get N' (8), and *-ghquute-* 'to encounter N' (9), *-ghhagh** 'little N' (10), and *-ghhalek* 'how V it is!' (11).

- (8) angyaghquuq
 angyagh-ghqu-uq
 boat-go.to.get.N-IND(3s)
 'he went to get a boat' (BAb-272)

- atkugkuuq
 atkug-ghqu-uq
 parka-go.to.get.N-IND(3s)
 'he went to get a parka' (BAb-272)
- (9) qanighquutuq
 qanig-ghquute-uq
 snow-encounter.N-IND(3s)
 'he encountered snow' (BAb-272)
- (10) kiiwhaq
 kiiw-ghhagh*-Ø
 river-little.N-ABs
 'little river' (BAb-271)
- (11) iipghalek!
 ipeg-ghhalek
 be.sharp-how.V.it.is!
 'how sharp!' (BAb-271)

The symbol = (equal sign) is used throughout for enclitic boundaries, whereas Badten et al. (1987:311-12) uses the + boundary symbol.

The letters in parentheses in front of some postbases and other suffixes, mostly (*g*), (*ng*), (*t*), and (*i/u*) count when affixing the element to certain phonemes or phonological sequences. Details are given in Jacobson (1979) and in my postbase list (chapter 2, subsection 2.5.3).

The orthographic conventions used in this work for quoting noun bases or noun-deriving postbases differ from Jacobson (1990a) and Badten et al. (1987) in that the underlying form (ending in a hyphen) is given rather than the surface forms in the absolutive singular case. Thus, surface nouns ending in ...*k*, ...*kw*, ...*q*, ...*d^o*, ...*n*, or ...*ta* are given as ending in ...*g-*, ...*w-*, ...*gh-*, ...*e-*, and ...*te-*, respectively. This is done for the sake of consistency, since verb and verb-deriving postbases are only given in the underlying form in the above reference works.

Two morphophonemic symbols mark base-final morphophonemic segments. ...*gh**- is the "strong" ...*gh-*, to be distinguished from "weak" ...*gh-*, as pointed out above (Jacobson 1979:5-8, 1990a:11-12; Badten et al. 1987:4). The *t^o* is a symbol

used in Jacobson (1979:5), but not in Badten et al. (1987) or Jacobson (1990a). The ...t^oe- ending of some bases changes into / / when followed by certain suffixes.

1.6.3. Morphology and Syntax

1.6.3.1. General Observations

For Eskimo, perhaps more than for any other language, the distinction between morphology and syntax, although it exists of course, is very unrevealing from a descriptive point of view. Therefore, I treat morphology and syntax together, since, as stated above, one of the goals of this work is to show how intertwined morphology and syntax are.

In this subsection, I outline the main structure of the word and provide some observations on word order and on various minor grammatical and terminological matters, not crucial to the subject of this work, but occasionally encountered in the example sentences. In subsections 1.6.3.2 and 1.6.3.3, I provide a discussion of case and mood, which will be detailed because abbreviations for case and mood appear constantly in the example sentences; I also emphasize the case and mood facts peculiar to CSY. As a preparation for the discussions of derivational morphology and its relationship to syntax in chapters 2 and 6, I give a descriptive overview of CSY derivational morphology in subsection 1.6.3.4 and of the relationships between derivation and syntax in subsection 1.6.3.5, with copious exemplification.

The structure of a CSY word, and actually of a word in all Eskimo languages, is described by the following formula, taken from Woodbury (1981:104):

$$(12) \quad \text{base} + \text{postbases}_{\text{O}}^{\text{n}} + \text{ending} + \text{enclitics}_{\text{O}}^{\text{m}}$$

The base is the lexical core of the word. Some bases must take at least one postbase before they can be inflected; these are called roots, and are marked by the symbol <R> in this work. Roots belong to three semantically defined classes: dimensional, emotional, postural roots. Postbases are derivational suffixes; the ending is a morphologically simple or complex unit, and functions as an inflectional suffix. Not shown in the above formula is the fact that a few postbases can occur after certain noun endings. These are discussed in chapter 3. An expanded base is a base followed by one or more postbases. Expanded bases are called bases when the difference between the two is not relevant to the point under discussion.

On unpossessed nouns, endings mark case and number, and on possessed nouns, they mark number and person of possessor in addition to the case and number of the noun. On verbs, endings mark mood and person and number of the subject (on intransitive verbs) or mood and person and number of the subject as well as person and number of the object (on transitive verbs). In addition to the inflectional categories of *case* and *mood*, treated in subsections 1.6.3.2 and 1.6.3.3, the inflectional categories of CSY are thus *person* (1st, 2nd, 3rd, and 3R, or reflexive possessive person) and *number* (singular, dual, and plural). In noun phrases, 3R marking of the possessor signals that an entity is coreferential with the third person subject of the possessed noun phrase's own clause. In verbs, the 3R person generally cross-references an entity which is coreferential with the subject of a clause superordinate to the clause containing this verb. Examples of 3R marking are found in examples 26, 34, 43, 68, 98, 99, 104, 105, 109-12, 115-17, and 146 in this chapter.

Enclitics are suffixes since they are bound, but syntactically they are particles; a detailed description of them is given in chapter 4.

An example of a CSY word is 13, where *angyagh-* 'boat' is the base; *-ghllag-* 'big N', *-nge-* 'to acquire N', and *-yug-* 'to want to V' are postbases; *-tuq* is the third-person subject Indicative mood ending; and *=llu* 'also' is an enclitic.

- (13) *angyaghllangyugtuqlu*
angyagh-ghllag-nge-yug-tuq=llu
 boat-big.N-acquire.N-want.to.V-IND(3s)-also
 'also, he wants to acquire a big boat' (JA-2)

The word order of the CSY clause is often SV and OV, from which one could conclude that the main structure of the clause is SOV, but clauses containing both an S and an O are actually not common. Furthermore, the order of elements in the clause is quite free (i.e., VS and VO are also quite common). Various complements with adverbial cases can also, of course, occur in the clause; these tend to occur after the verb, but they can also occur at the beginning of the clause or, less often, between the subject or object and the verb. It appears that, as in many other case-marking polysynthetic languages, word order is primarily determined by discourse considerations.

Also in CSY there are sequences of one or more clauses with subordinate verbs ending with a clause with the superordinate or main verb; here also the order superordinate clause-subordinate clause occurs. A verb subordinate to another verb can in turn be superordinate to still another verb. Examples of CSY clauses are given in the subsequent subsections and also in chapter 4.

In my description of the CSY noun phrase, I follow Woodbury (1981:201) in using the notions of dependency and apposition. From a semantic point of view, a constituent dependent on another is never coreferential with it; a constituent in apposition is coreferential with it.

The type of CSY noun phrase where one noun is dependent on another is the possessor-possessum construction. Here, the possessor is in the relative case and is dependent on the possessum, which obligatorily contains third person and number marking agreeing with the possessor, as well as its own number and case marking. The dependent noun tends to precede the head noun. Examples of the possessor-possessum construction are 14, 15, and 16, showing the recursivity of the construction:

- (14) aghnam atkuga
 aghnagh-m atkug-(ng)a
 woman-RLs parka-AB(3s-s)
 'the woman's parka' (JA-27)
- (15) naaygham qaaynga
 naayghagh-m qaye-(ng)a
 mountain-RLs top-AB(3s-s)
 'the top of the mountain' (BAb-178)
- (16) aghnam naangan atkuga
 aghnagh-m naa-(ng)an atkug-(ng)a
 woman-RLs mother-RL(3s-s) parka-AB(3s-s)
 'the woman's mother's parka' (JA-27)

In the CSY noun phrase, demonstratives or nominal modifiers are in apposition with the noun head; since they are coreferential to it, they must agree in case and number with it. Both demonstratives and nominal modifiers tend to follow the head, but this is not always the case. Examples of noun phrases (in boldface where they are given as part of a clause) with constituents in apposition are

- (17) Sangaawa **yuuk una?**
 sangagh-(ng)u-a yug-Ø u-na-Ø
 what-be.N-INT(3s) person-ABs here(D:R)-na-ABs
 'What is this guy?' (o)

- (18) **ligna qikmiq qilugtuq.**
 iig-na-Ø qikmigh-Ø qilug-tuq
 over(D:R)-na-ABs dog-ABs bark-IND(3s)
 'That dog barked.' (JAc-81)
- (19) **Pingayut qikmighten neghtut.**
 pingayu-t qikmigh-ten negh-tut
 three-ABp dog-AB(2s-p) eat-IND(3p)
 'Your three dogs ate.' (JA-52)
- (20) **sivulighpigaq qikmiq**
 sivu-lighpigagh-Ø qikmigh-Ø
 front-very.N-most.one-ABs dog-ABs
 'lead dog (in a dogteam)' (SI-96)
- (21) **Kemkegnagmeng neghyaghqameng saghnaanga.**
 kemkegnag-meng neghyaghqameng saghna-unga
 sea.vegetable-MDs eat-something.that.will.be.V-ed-MDs gather-IND(1s)
 'I gathered some sea plants for eating.' (SI-77)

Both dependency and apposition can co-occur in complex noun phrases like the ones in 22 and 23:

- (22) **taagum kiiwem payegkeni**
 taag-um kiiw-m paye-gkeni
 over(D:E)-RL river-RLs mouth-LC(3s-d)
 'at the mouth of the river over there' (HEN-9)
- (23) **nutagham igleghusim pekeqellgha**
 nutaghagh-m iglegh-(u)sigh-m pekeqe-llegh-(ng)a
 new.thing-RLs travel-device.for.V-ing-RLs carelessly dig-
 the.one.the.possessor.V-ed-AB(3s-s)
 'the ones (i.e., pathways) dug up by modern vehicles' (BAb-153)

The question of whether Eskimo has a verb phrase constituent has not been considered by linguists working on Eskimo. Postulating such a constituent would not be revealing for the language, mainly because of the extensive structural parallels existing between noun phrases and clauses, shown in Woodbury (1985a), and in

earlier work referred to there. In this study, I follow the general consensus in assuming that there is no such constituent.

There are, however, a few other grammatical matters to be discussed here. The CSY base classes that can be identified on morphological and syntactic criteria are the same as the ones postulated for CAY (Central Alaskan Yupik) by Woodbury (1981:106-8). They are Noun bases (N), Verb bases (V), and Particle bases, each divided in various subclasses. I will refer to Woodbury's work for a complete discussion and justification of these classes and only give here some explanations on some of the Noun subclasses, since they appear often in the morphological analyses of the example sentences in this work. These are Demonstrative bases (D), Demonstrative Adverb bases (DA), Independent Pronoun bases (PN), Independent Relative bases (IR), Numeral bases (NM), and Positional bases (PS).

Demonstrative bases function like demonstrative pronouns or adjectives; they can be inflected for all cases. Demonstrative bases can contain the suffixes *-na-*, not glossed in the analysis of example sentences, and *-ku-*, glossed in the analysis of example sentences as PL. These are discussed in chapter 3, section 3.2. Examples of Demonstrative bases occur in 17, 18, 22, 54, 95, 114, 136 in this chapter.

Demonstrative Adverb bases function like adverbs, and therefore are inflected with adverbial cases (i.e., EQ, LC, MD, TM, VL, see subsection 1.6.3.2 below) only; Demonstrative Adverbs also occur very commonly as particles without case inflection. Examples of Demonstrative Adverb bases occur in 38, 46, 58, 65, 79, 82, 107, 110, 111, 114 in this chapter. From a semantic point of view, both subclasses of Demonstratives form an extremely rich set (Jacobson 1990a:80-84), and from the morphological point of view, they are unique in that they may contain the only prefix of the language.

Independent Pronoun bases are only used in cases of emphasis or special circumstances (Jacobson 1990a:84-85), since pronominal reference is always indicated in the verb ending; they are unique in that the distinction between Absolutive and Relative case is neutralized in the first, second, and third Reflexive person pronouns, and thus only exists for the third person pronouns. Examples of Independent Pronoun bases occur in 30, 32, 56, 57, 68, 74, 138, 146 in this chapter.

Independent Relative bases only take possessed Relative case endings, even though they are not dependent on a head noun. IR bases identified so far are *allakagh** 'separately'; *ellnginagh** or *ellnginaghghagh** 'only, alone'; *kezegh-* or *kezeghghagh** 'only, alone'; *qerngagh** 'together'; and *tamaghghagh** 'all', as well as postural roots (Menovshchikov 1967:206; Rubtsova 1971:226; Jacobson 1979:83, 1990a:59-61). To this, one must add the postbase *-tuumagh** 'together with one's

N', which derives IR bases from nouns, and the postbase *-(i/u)magh** 'at the same time as one's V-ing', which derives IR bases from verbs. Examples are

- (24) Neghaqa perara tamaghhaan.
 negh-aqa perara-Ø tamaghghagh*-(ng)an
 eat-IND(1s-3s) jelled minced.meat all-RL(3s-s)
 'I ate all the jelled minced meat.' (Steven Jacobson pc)
- (25) Neghtuten ingaghpek.
 negh-tuten <R>ingagh-pek
 eat-IND(2s) lie.down-RL(2s-s)
 'You ate lying down.' (JAc-60)
- (26) Amaaghllagem nenglasiighumaghmi pimakanga (...)
 amaa-ghllag-m nenglagh-siigh-(i/u)magh*-mi pi-(i/u)ma-kanga
 wolf-big.N-RLs laugh-kind.of.V-while.V-ing-RL(3Rs-s) say-PST-TRP(3s-3s)
 'The big wolf, kind of laughing, said to him (...)' (NBK/7-7')

Numeral bases are a self-explanatory category. Examples of Numeral bases are found in 19 and 134.

Positional bases are always heads in possessor-possessum constructions and denote a position or area with respect to the possessor. The examples include the PS bases *ilu-* 'area inside' (27) and *tunga-* 'area near; close relative' (28), also in 68; example 22 above involves the PS base *paye-* 'mouth, opening of'.

- (27) Qepghaghtuq mantegham ilungani.
 qepghagh-tuq manteghagh-m ilu-(ng)ani
 work-IND(3s) house-RLs area.inside-LC(3s-s)
 'He worked inside the house.' (JA-48)
- (28) Ivaghikaagunga ukazimeng Sivuqam tungangani.
 ivagh-i-kau-gunga ukazigh-meng Sivuqagh-m tunga-(ng)ani
 search.for-HALF.TR-PST-IND(1s) rabbit-MDs Gambell-RLs area.near-LC(3s-s)
 'I was looking for rabbits near Gambell.' (HEN-9)

Some noun bases referring to objects perceived of in the culture as somehow having two parallel sides (such as rivers, sheets of ice, windows, and scissors), various containers (such as buckets, stoves, and outboard motors), vehicles with runners or wheels (such as sleds, bicycles, snowmachines, cars, and trucks), or means of communication (such as radios and telephones), can be morphologically marked as dual, even when semantically singular. Examples are found in 22, 47, 49, 50, 59, 115, 118 in this chapter.

1.6.3.2. Noun Cases

CSY has seven noun cases: the Absolutive, Relative, Modalis, Localis, Terminalis, Vialis, and Equalis. The Absolutive (AB) case is used for (1) subject of an intransitive verb; (2) object of a transitive verb; and (3) condition about which, discussed in subsection 1.6.3.5. Examples of the first two uses of the Absolutive case are found passim in this study; examples of the third use are 137-141.

The Relative (RL) case is used for (1) subject of a transitive verb (i.e., ergative; examples 29 and passim); (2) possessor of a possessed noun (i.e., genitive; examples 14-16, 27, 28, and passim); (3) used in Independent Relative (IR) construction (see explanations in subsection 1.6.3.1 and examples 24-26).

- (29) Qikmima neghaa kayu.
 qikmigh-ma negh-aa kayu-Ø
 dog-RL(1s-s) eat-IND(3s-3s) fish-ABs
 'My dog ate the fish.' (JAc-35)

The Modalis (MD) case is used for (1) place from which, time from which (i.e., ablative; example 30); (2) indefinite object of an intransitive verb (examples 30-33 and passim); (3) independent noun phrase in apposition to an incorporated noun (example 134 below); (4) direct object of three-argument verbs (i.e., the subject matter of verbs of speaking or thinking, and the thing given in verbs of giving; examples 34 and 35); (5) object of a comparison (example 36); (6) instrument (example 37); (6) marking certain infinitival or gerundial complements (see discussion in subsection 1.6.3.5 and examples 135 and 136 below).

- (30) Unaaq aqfatunga qawaagmeng elpesineng.
 unaaq aqfa-(u)te-unga qawaag-meng ell-pesineng
 this.morning go.get-HALF.TR-IND(1s) bird-MDs PN-MD(2p)
 'I went to get some birds from your house this morning.' (SI-32)

Example 29 above is to be compared with the sentence in 31, where the verb is morphologically intransitive, the subject is in the AB case, and the indefinite object is in the MD case:

- (31) Qikmiq neghtuq kayumeng.
 qikmigh-Ø negh-tuq kayu-meng
 dog-ABs eat-IND(3s) fish-MDs
 'The dog ate a fish.' (JAc-35)
- (32) (...) ellnganeng ivaghiik.
 ell-(ng)aneng ivagh-i-uk
 PN-MD3s search.for-HALF.TR-IND(3d)
 '(two brothers) were searching for her.' (SLb-20)
- (33) Aghnaghaat peghqightut sayumeng.
 aghnaghagh*-t peghqigh-tut sayugh-meng
 girl-ABp learn-IND(3p) traditional.Eskimo.dance-MDs
 'The girls are learning group dancing.' (SI-150)
- (34) Ungipaataa angagmineng.
 ungipagh-(u)te-aa angag-mineng
 spread.news-TR-IND(3s-3s) maternal.uncle-MD(3Rs-s)
 'He told him about his uncle.' (JA-30)
- (35) Iqallugmeng tuunumaanga.
 iqallug-meng tuune-(u/i)ma-aanga
 fish-MDs give-PST-IND(3s-1s)
 'He gave me some fish.' (JA-30)
- (36) Aangunga anengamneng.
 aange-unga anengagh-mneng
 be.big-IND(1s) older.brother-MD(1s-s)
 'I'm taller than my older brother.' (JA-30)
- (37) Aghnaq segguq ulaaghmeng.
 aghnagh-Ø segge-ug ulaagh-meng
 woman-ABs cut.open-IND(3s) knife-MDs
 'The woman is cutting with a knife.' (JA-30)

The Terminalis (TM) case is used for (1) place to which, time to which (examples 38 and 39); (2) subject of a transitive embedded verb, (see subsection 1.6.3.5 for a discussion of embedded verbs and examples 138, 144-147).

- (38) iqalliniighvimnnun aga pimaag
 iqalli-niigh-vig-mnnun aga pi-(i/u)ma-ug
 fish-V.as.a.specialized.activity-place.to.V-TM(1p-s) over(DA:E) go-PST-
 IND(3s)
 'he went up to our fish camp' (HEN-23)
- (39) aghulaquq naayvamun
 aghulaqe-ug naayvagh-mun
 leave-IND(3s) lake-TMs
 'he left to the lake' (JAc-25)

The Localis (LC) case is used for (1) place at which, time at which (examples 40-42); (2) object of a comparison when the verb is expanded with the postbase sequence *-negh-(ng)u-* 'to be V-er' (example 43); (3) marking nouns in the Participial mood (see subsection 1.6.3.3) that modify a first- or second-person AB element, agreeing with it in number but not in case (examples 44 and 45); this is reported for CAY by Miyaoka (1985:511-12) and Woodbury (1985a:77); (4) formal vocative, first reported by Miyaoka (1985:512) for CAY; a CSY example is 46.

- (40) Esnami piyutaaghyugaunga eslami pinilghiimi.
 esnagh-mi piyutaagh-yug-aqe-unga esla-mi pinigh-lghii-mi
 beach-LCs walk-want.to.V-PROG-IND(1s) weather-LCs be.good-INPLCs
 'I love to walk along the beach in good weather.' (SI-48)
- (41) Nani kaasin?
 na-ni kaate-zin
 where-LC arrive-INT(2s)
 'When did you arrive?' (HEN-5)
- (42) Saturday-mi nulughyaghyugtunga.
 Saturday-mi nulugh-yagh-yug-tunga
 (English)-LCs ice.fish-go.and.V-want.to.V-IND(1s)
 'I'd like to go fishing on Saturday' (HEN-9)

- (43) Aangenghuuq anengamini.
 aange-negh-(ng)u-uq anengagh-mini
 be.big-one.that.is.V.to.the.greatest.extent-be.N-IND(3s) older.brother-
 LC(3Rs-p)
 'He is bigger than his older brothers.' (JA-32)
- (44) Apakullghiigni unangniighyaghnaqukung.
 apa-kute-lghii-gni unange-niigh-yagh-naqe-ukung
 grandfather-have.N.as.associate.or.partner-INP-LCd hunt-
 V.as.a.specialized.activity-go.and.V-PROSP-IND(1d)
 'My grandfather and I are going to go hunting (lit., "We, the ones having
 grandfather as a partner, are going to go hunting").' (HEN-20)
- (45) neghyulghiini
 negh-yug-lghii-ni
 eat-want.to.V-INP-LCp
 'getting hungry' (dictionary definition of *igatagh*- 'to be hungry'); more
 precisely: '(you [or] we) who want to eat' (SI-56)
- (46) aghnaghaghghaghmi whani!
 aghnaghagh*-ghhagh*-mi wha-ni
 girl-little.N-LCs here(DA:R)-LC
 'hey, little girl!' (SLb-22; SEP-9)

The Vialis (VL) case is used for (1) route of physical or temporal motion (example 47); (2) instrument or means of conveyance (examples 48-50); (3) part of a whole toward which the action is directed (example 51).

- (47) Kiiwegnekun esnightunga.
 kiiw-gnekun esnigh-tunga
 river-VLd go.along.the.shore-IND(1s)
 'I walked along the shore of the river.' (JA-33)
- (48) tagiiq angyakun
 tagi-uq angyagh-kun
 come-IND(3s) boat-VLs
 'he came by boat' (JAc-26)

- (49) Qaltak meghmeng meghutkun imighagka.
qaltagh-k megh-meng megh-(u)te-kun imigh-agka
bucket-ABd water-MDs drink-device.for.V-ing-VLs fill-IND(1s-3d)
'I filled a bucket with water using a dipper.' (SI-96)
- (50) Nagaqughaqa C.B.-gnekun.
nagaqugh-aqa C.B.-gnekun
hear-IND(1s-3s) (English)-VLd
'I heard him on the C.B.' (HEN-14)
- (51) Tapghaq kepaqa qukaakun.
tapghagh-Ø kepe-aqa qukagh-(ng)akun
rope-ABs cut.in.half-IND(1s-3s) middle-VL(3s-s)
'I cut the rope in the middle.' (SI-78)

The Equalis (EQ) case is used for (1) similarity (example 52); (2) language specification (example 53); (3) price specification (example 54).

- (52) neghtuq qikmitun
negh-tuq qikmigh-tun
eat-IND(3s) dog-EQs
'he ate like a dog' (JAc-26)
- (53) Yupigestun liisupigtunga.
Yupig-stun liite-yug-pigte-unga
Yupik-EQp learn-want.to.V-really.V-IND(1s)
'I really want to learn Yupik.' (HEN-16)
- (54) Naten akitutka una?
na-ten akite-(u)tke-a u-na-Ø
where-EQ reciprocate-V.on.account.of-INT(3s) here(D:R)-na-ABs
'How much does this cost?' (NBK/Ø-44, 59; NBK/4-39)

In CSY, but apparently not in other Eskimo languages, verbs can be inflected as nouns: the verb can be just a verb base or it can be expanded by verb derivational postbases, and it is followed by a nominal (usually nonpossessed) case ending. Verbs appear to be used in cases where one would expect a nominalization with the postbase *-lleg-* 'activity of V-ing' or with a Participial verb mood (see subsection

1.6.3.3 below). They also seem often used in the CSY dictionary definitions of Silook et al. (1983), presumably for reasons of conciseness. I exemplify and summarize some of my preliminary findings on verbs inflected as nouns here, but further study is necessary in order to determine the extent of this phenomenon.

Absolutive case endings on verbs are mainly used by young children, people talking to children, and elderly people in emotionally loaded situations, and seem to be considered inelegant by most people. Expectedly, they are not common in well-told stories, are a little more common in historical narrative and quite common in everyday conversation. Examples are

- (55) whanga qiya!
whanga-Ø qiya-Ø
PN1-ABs cry-ABs
'(when I was tattooed as a little child) was I crying!' (NBK/7-48)
- (56) Mangteghangllaq!
mangteghag-ngllagh-Ø
house-make.N-ABs
'Making a house!' (Answer of a child to the question: "What did they do?")
(NBK/5-72)
- (57) Whanga tuguteliq.
whanga-Ø tugute-ligh-Ø
PN1-ABs tusk-provide.with.N-ABs
'I am going to put the tusks on.' (A child making a walrus out of modeling clay.) (NBK/5-29)
- (58) Amenqun aangeghllaget asingani tawaten!
amen=qun aange-ghllag-t asi-(ng)ani tawa-ten
then-see be.big-V.in.a.big.way-ABp area.under-LC(3s-s) there(DA:R)-EQ
'Remember, the bigger ones at the bottom, like that!' (A mother instructing her child on how to build a thing with modeling clay.) (NBK/5-31)

Verbs with the Relative case mean 'because of V-ing':

- (59) Aghyum naavuk.
aghyugh-m naave-uk
get.old-RLs break-IND(3d)
'It (a stove) broke because it's old.' (HEN-19)
- (60) qepgham naavyightestellgha
qepghagh-m naavyigh-(te)ste-ilegh-(ng)a
work-RLs become.very.tired-CAUS-activity.of.V-ing-AB(3s-s)
'it's running out of energy because of too much work' (SI-89)
- (61) Nefkuuraq epumakanga eslametepagllagem.
nefkuuragh-Ø epe-(i/u)ma-kanga esla-mi-et^oe-pagllag-m
dried.meat-ABS become.flat.tasting-PST-TRP(3s-3s) outdoors-LCs-be.N-
V.too.much-RLs
'Being outside too long has made the dried meat lose its flavor.' (SI-47)

Verbs with the Localis case mean 'in the time of V-ing':

- (62) neqangisagllagmi
neqa-(ng)isag-ghllag-mi
food-lack.N-V.in.a.big.way-LCs
'in a time of famine' (NBK/5a-36)
- (63) ughunqightugtemmi
ughunqightughte-mi
for.there.to.be.thawed.patches-LCs
'in the time of thawed patches' (JA-51)

Verbs with the Modalis case form indefinite objects of intransitive verbs, or mean 'from V-ing'; like verbs with the Absolutive case, they are also considered inelegant by some speakers.

- (64) Laluramketimeng liisalghiinga (...)
Laluramke-ti-meng liite-yalghiinga
White.person-speak.language.of.N-MDs learn-IPO(1s)
'when I was learning English (...)' (HEN-16)

- (65) piniighteligha ama yugem sameng qefliq'meng
 pinigh-(ng)ughte-llegh-(ng)a ama yug-m sa-meng qefliqe-meng
 be good-become.V-er-act.of.V-ing-AB(3s-s) over(DA:O) person-RLs
 something-MDs be angry-MDs
 'a person's becoming calm from some bad behavior' (dictionary definition of
nekleg- 'to settle down') (SI-119)

Verbs with the Modalis case also occur as adverbial modifiers of verbs of motion, as in examples 66-69. This construction is not considered inelegant. Such adverbial modifiers are considered to be "lexicalized" (i.e., nonproductive) forms by Soviet authors (Menovshchikov 1967:206; Rubtsova 1971), but I am not sure that this is correct.

- (66) Kuuni igleghtaquq amlluqaqumeng.
 kuuni-Ø igleghte-aqe-uq amllugh-qaqu-meng
 horse-ABs travel-PROG-IND(3s) take.a.step.over-V.intermittently-MDs
 'The horse is going at walking pace.' (RUa-70)
- (67) tagiiq piyugmeng
 tagi-uq piyug-meng
 come-IND(3s) walk-MDs
 'he came walking' (JAc-90)
- (68) Kiitiqaq ellmi tuungminun kaasimaaq aaghwmeng.
 kiitigh-kagh-Ø ell-mi tunge-minun kaate-(i/u)ma-uq aaghhw-meng
 wound.by.bullet-one.that.has.been.V-ed-ABs PN-RL(3R) vicinity-TM(3R-
 s) arrive-PST-IND(3s) crawl-MDs
 'The shot person arrived crawling to his own side.' (RUa-108)
- (69) Mekelghiiq ketanqumeng igleghtaquq.
 mekelghiigh-Ø ketanqu-meng igleghte-aqe-uq
 boy-ABs run.fast-MDs travel-PROG-IND(3s)
 'The boy is going fast.' (RUa-236)

Verbs with the Terminalis case mean 'for the purpose of V-ing':

- (70) Aghallegtam aghaliitaanga naasqiemnnun.
 aghallegtagh-m agha-ligh-(u)te-aanga naasqugh-iqe-mnun
 doctor-RLs medicine-provide.with.N-TR-IND(3s-1s) head-for.N.to.ache-
 TM(1s-s)
 'The doctor gave me medicine for my headache.' (SI-12)
- (71) piniightemmun kayutet
 pinigh-(ng)ughte-mun kayute-t
 be.good-become.V-er-TMs aid-ABp
 'aids for regaining health' (dictionary definition of *agha*- 'medicine') (SI-12)
- (72) Aatkat naghaagghmun.
 Aatkagh-t naghaaggh-mun
 article.of.clothing-ABp play-TMs
 'Clothes for a costume party.' (NBK/10-38)
- (73) tagimun sukatut
 tagi-mun sukate-ut
 come-TMs go.fast-IND(3p)
 'coming they went fast' (JAc-90)

A few verbs with the EQ case can occur as adverbial modifiers. It is most likely that these are "lexicalized" formations. Examples are:

- (74) aghulaaquq pinitun
 aghula-aqe-uq pinigh-tun
 dance-PROG-IND(3s) be.good-EQs
 'he is dancing well' (JAc-90)

- (75) Ellngit aklumatun kiyaghsimaat.
 ell-(ng)it aklu-(i/u)ma-tun kiyaghte-(i/u)ma-ut
 PN-AB(3p) be.in.need-PST-EQs live-PST-IND(3p)
 'They lived in poverty.' (RUa-43)

1.6.3.3. Verb Moods

In this subsection, the discussion and exemplification of CSY verb moods will be more extensive for those not previously identified (IPO, TPO, C2O, and VFO) as well as for those not completely described (INP and TRP).

For the classification of moods, I have followed the criteria, terminology, and abbreviations of Woodbury (1981:122-25). Woodbury distinguishes four classes of moods, Independent, Appositional, Participial, and Oblique, to which I have added a fifth class, Participial Oblique, which apparently does not exist in any other Eskimo language, with the exception of the Nunivak dialect of CAY.² The functions and characteristics of these four classes are shown in the following table.

My table differs from Woodbury's (1981:124) only in that the Appositional is marked +/- for 3R and in the addition of the Participial Oblique. As indicated in the table, independent moods occur in main clauses only and have only a three-way distinction of person since they do not have 3R marking. They always function as verbal predicates. The Appositional mood can occur in main clauses as well as in subordinate clauses. The +/- specification for 3R marking indicates that a formal four-way person distinction is not made, since formal 3R person marking, and not third person marking, occurs in the intransitive paradigm of the Appositional mood and since formal third person marking, but not 3R person marking, occurs in the transitive paradigm. Woodbury's *plus* specification referred to the fact that 3R is semantically present. The Appositional also has a predicative function. Participial moods can occur in main and subordinate clauses, can have only a three-way person distinction, and can have a nominal as well as a predicative function. In effect, a nominal Participial mood functions like a postbase deriving a verb from a noun. Oblique moods never mark main clauses, consistently distinguish third person from 3R person, and have an oblique function in that they are embedded in other clauses as

² Steven Jacobson informs me that the IPO mood also exists in the Nunivak dialect of CAY, but not apparently in any other dialect of CAY. An example from Nunivak is *Piyalriameng makut mikelngut tan'gurrat laanguaryatulliniut nuna yatiitnun ayagluteng*. 'The children used to go the end of the village and play' (Steven Jacobson, personal communication October 1988).

	Main Clause	3R	Function
Independent	+	-	predicative
Appositional	+/-	+/-	predicative
Participial	+/-	-	predicative/nominal
Oblique	-	+	oblique
Participial Oblique	-	+/-	oblique

oblique constituents and serve as adverbial modifiers to the embedding clause. Like the Oblique moods, the Participial Oblique moods never mark main clauses, and have an oblique function. Here the +/- specification for 3R marking refers to the fact that only 3R person, and not third person marking, exists in these moods and therefore that there is, as in the Independent and Participial moods, a three-way person distinction only. Hence, even though there is *formal* marking of a 3R person in the Participial Oblique moods, the distinction between 3 and 3R, as exemplified in example 99 for the Oblique moods, cannot be made. Examples and further discussion of the Participial Oblique moods are provided below.

The fifteen moods falling into the five classes are given here with their abbreviations and inflectional markers. Further information on inflectional markers and the person and number markers following them can be found in Jacobson (1979, 1990a). Short glosses or explanations of the meaning of the mood are given after the abbreviation where the name is not self-explanatory.

1. Independent moods:

Indicative (IND)

(for intransitive:) *+(g/t)ugh-*

(for transitive:) *+agh-*

Interrogative (INT)

(for 3rd person subj.): *+(g/t)a-*

(for 1st and 2nd person subj. sg.): *+(t)zi-*

(for 1st and 2nd person subj. pl. and dual:) *+(c)(s)te-*

Optative (OPT) (also imperative for 2nd person subjects)

(for 3rd person subj. :) @li-

(for 1st person subj. sg. :) @la-

(for 1st person subj. pl. and dual. :) :(e)lte-

(for 2nd person subj. sg. :) several phonologically conditioned endings, including -Ø-

(for 2nd person subj. pl. and dual. :) @+(i)te-

2. Appositional mood (APO) 'V-ing'; 'after V-ing'

(for negative bases ending in ...t^oe- :) @na-

(elsewhere. :) @lu-

3. Participial moods:

Intransitive Participle (INP) (various meanings)

(for all bases ending in ...t^oe- :) @ngugh*-

(elsewhere. :) @-lghii-

Transitive Participle (TRP) (various meanings)

(for 3rd person subj. :) @-ka-

(for 1st and 2nd persons subj. :) @-ke-

4. Participial Oblique moods:

Intransitive Participial Oblique (IPO) 'now that'; 'when'

+yalghii

Transitive Participial Oblique (TPO) 'now that'; 'when'

+yaqe--

5. Oblique moods:

Consequential (CQO) 'when, while (in the past)'

(after the postbase -(g)aqe- :) +ng(a)-

(elsewhere. :) @+y(a)-

Conditional (CDO) 'if'; 'when (in the future)'

(with 1st, 2nd, and 3R persons subj. :) @-ku-

(with 3rd person subj. :) @-k(a)-

Concessive (CSO) 'even though'

-ghaga(agh)-

Precessive (PRO) 'before'

@+vagi(g(a)-

Contemporative 1 (C1O) 'whenever'

@-*negh(a)-*

Contemporative 2 (C2O) 'only when, only whenever'

:*(ng)inanegh(a)-*

Volitive of fear (VFO) 'for fear that'; 'lest'; 'would that not'

+*nayuka-*

(rare variant: +*yuka-*)

Examples of indicatives (IND) are found passim in this study. Interrogatives (INT) are found in examples 17, 41, 54, 132, 139. An Optative (OPT) is found in example 4.

The peculiarity of the Appositional mood (APO) is that when it is used in a subordinate clause, the subject of the verb is the same as the subject of the verb in the main clause. There are a few exceptions to this, which are discussed in Jakobson (1990a:77-78). APO endings in subordinate verbs are found in examples 76-78.

- (76) Aanuq neghluni.

aane-uq negh-luni

go.out-IND(3s) eat-APO(3s)

'He went out after eating.' (JAc-74)

- (77) Piyugaquq sukalluni.

piyug-aqe-uq sukate-luni

walk-PROG-IND(3s) go.fast-APO(3s)

'He is walking fast.' (JAc-75)

- (78) Neghluku kemekrak aanunga.

negh-luku kemeg-krag-Ø aane-unga

eat-APO(3s-3s) meat-piece.of.N-ABS go.out-IND(1s)

'After eating the meat I went out.' (JAc-75)

In main clauses, APO marking can be used instead of IND mood marking in hurried conversation or narrative, as in 79, or instead of an OPT mood, for requests or commands, as in 80:

- (79) Unaaq taghtuqiinaghlunga, qayungllaghlunga kufingllaghlunga
 qayuneghmeng taaqlunga aanlunga qergese-gnekun qineghllunga, imani
 aliineghllugllaghuftuq.
 unaaq taghtugh-qiinagh-lunga qayugh-ngllagh-lunga kufi-ngllagh-lunga
 qayugh-negh-meng taaq-lunga aane-lunga qergese-gnekun qineghte-
 lunga ima-ni aliinegh-ghllug-ghllag-(ng)u-fte-uq
 this.morning wake.up-just.V-APO(1s) tea-make.N-APO(1s) coffee-
 make.N-APO(1s) drink.tea-act.of.V-ing-MDs finish-APO(1s) go.out-
 APO(1s) window-VLd look.out-APO(1s) here(DA:O)-LC
 clear.calm.day-N.departed.from.natural.state-big.N-be.N-appear.to.V-
 IND(3s)
 'This morning, I woke up, I made tea, I made coffee, I finished drinking tea, I
 went out to look through the window, it was a beautiful day outside.'
 (NBK/2-11)
- (80) Neghluten!
 negh-luten
 eat-APO(2s)
 'Eat!' (JA-73)

Participial moods have a predicative use and a nominal use, and since the inflectional endings do not usually allow a distinction, it is not always clear which use is predicative and which is nominal. The differences between these two uses in CSY are as follows:

The Intransitive Participle (INP) and Transitive Participle (TRP) moods can be used predicatively, to convey the meaning of a vivid past, the events of which have usually not been witnessed by the speaker. An example from a traditional tale is

- (81) Quynghitupiglleghhiit.
 quynghigh-tu-pigte-lghhiit
 reindeer-have.a.lot.of.N-really.V-INP(3p)
 'They had a lot of reindeer.' (NBK/6-9)

In this particular predicative use, the Participial mood is almost always immediately preceded by one or more of the verb derivational postbases *-(i/u)ma-* 'PAST TENSE', *-aqe-* 'PROGRESSIVE ASPECT', and *-yagh-* 'to V in vain' (see chapter 2, subsection 2.5.3, division D. 2-4). The postbases refine the basic meaning of the Participial mood, *-(i/u)ma-* emphasizing a narrative, often mythical, past

meaning, *-yagh-* emphasizing that the past situation does no longer exist or that present conditions are irrelevant to it, and *-aqe-* referring to a habitual past, often in historical narrative. However, it would be incorrect to assume that the postbase and the Participial mood form lexicalized units, since the meaning of one postbase does not exclude the meaning of another postbase, and several postbases can co-occur (in a fixed order discussed in chapter 2, subsection 2.3.4.2). Example 82 illustrates all three postbases:

- (82) Quyngiilluku salin taaganingani tespamaken amiqllu pimaasqaqangat.
 quyngh-(ng)it^oe-luku salin taaga-ni-(ng)ani tespama-ken amigh-Ø=llu
 pi-(i/u)ma-aqe-yagh-kangat.
 reindeer-not.have.N-APO(3p-3s) not.yet over(DA:E)-LC-LC(3s-s) (i.e.,
 'long before that') up(DA:O)-MD skin-ABs-also get-PST-PROG-
 V.in.vain-TRP(3p-3s)
 'Long before that, not having reindeer yet, they would get (reindeer) skin
 from up there (i.e., Siberia).' (APb-114)

Examples of Intransitive Participials (INP) used predicatively, are, with *-(i/u)ma-*, 109, 110, 117, and 120; with *-aqe-*, 84; and with *-yagh-*, 83.

- (83) Ayumiq uukna mayeraaghpagtuyalghii.
 ayumiq uuk-na-Ø mayeraagh-pag-tu-yagh-lghii
 long.ago near(D)-na-ABs giant-large.N-have.a.lot.of.N-V.in.vain-INP(3s)
 'Long ago there were giants in this area.' (SI-88)
- (84) Uksunghani unkuseniighaqelghiikut (...)
 uksugh-negh-(ng)ani unkuse-niigh-aqe-lghiikut
 be.winter-state.of.V-LC(3s-s) trap-work.with.N-PROG-INP(1p)
 'during winter, we would trap (foxes) (...)' (NBK/3-37)

Examples of Transitive Participials (TRP) used predicatively, are, with *-(i/u)ma-*, 26, 61, 121; with *-aqe-*, 85, 86; and with *-yagh-*, 85.

- (85) Neghighluku kuunikun mangteghat nuugtaqsaqangit.
 neghigh-luku kuuni-kun mangteghagh-t nuugte-aqe-yagh-kangit.
 happen.long.ago-APO(3p-3s) horse-VLs house-ABp move-PROG-
 V.in.vain-TRP(3p-3p)
 'Long ago they used to move buildings using horses to pull them.' (SI-82)

- (86) (...) thirty siipngan kaviiq kaatutagegkefut.
 thirty siipe-ngan kaviigh-Ø kaate-(u)te-aqe-kefut
 (English) have.a.leftover-CQO(3s) fox-ABs arrive-V with-TRP(1p-3s)
 '(...) we would bring in more than thirty foxes.' (NBK/3-37)

A second predicative use of the Participial moods is found in subordinate clauses, and has a causal meaning. In this case, no postbases are typically associated with it. INP examples are given in 87 and 88.

- (87) Quyakamken laalighlleghhiiten.
 quyake-amken laalighte-lghiiten
 be.happy.about-IND(1s-2s) visit-INP(2s)
 'I am glad you came to visit.' (NBK/Ø-35, 50)
- (88) Aatkanka kagpaganka unaami aghulaqnaqelghiinga.
 aatkagh-nka kagpag-anka unaagh-mi aghulaqe-naqe-lghiinga
 garment-AB(1s-p) pack-IND(1s-3p) morning-LCs leave-PROSP-INP(1s)
 'I packed my clothes because I am leaving tomorrow.' (SI-72)

TRP examples with causal meaning are given in 89-91. One will note that in 91, the causal meaning is clarified by the optional conjunction *qayughllak* 'because'.

- (89) Quyakamsi esghaqemsi.
 quyake-amsi esghagh-kemsi
 be.happy.about-IND(1s-2p) see-TRP(1s-2p)
 'I am glad to see you (pl.).' (NBK/Ø-34, 49)
- (90) Naqam aanaqunga upughanneghilkefsinga.
 naqam aane-aqe-unga upugha-(u)te-nghit'e-kefsinga
 in.that.case go.out-PROG-IND(1s) be.hospitable-TR-NEG-TRP(2p-1s)
 'In that case I am leaving because you didn't make me feel welcomed.'
 (BAb-128)
- (91) John tagiiq qayughllak Mary-m birthday-kegkanga.
 John-Ø tagi-uq qayughllak Mary-m birthday-ke-kanga
 (English)-ABs come-IND(3s) because (English)-RLs (English)-
 have.as.one's.N-TRP(3s-3s)
 'John came because of Mary's birthday celebration.' (NBK/10-35)

In their nominal use, Participial mood endings actually function as VN postbases (see subsection 1.6.3.4), and can thus be followed by various noun case endings. The resulting nominalized clauses are noun phrases, usually in apposition with another noun, thus functioning like nominal modifiers or relative clauses. As a VN postbase, the INP ending can be translated as 'the one who V-ed.' Examples of the nominal use of the INP are 92-95.

- (92) Mekelghiighet quyngighyaghaqelghiit maliggnaqanka.
mekelghiigh-t quyngigh-yagh-naqe-lghii-t maligte-naqe-anka
boy-ABp reindeer-go.after.N-PROSP-INP-ABp follow-PROSP-IND(1s-3p)
'I am going to follow the boys who were going after the reindeer.' (SI-93)
- (93) Aaghlū esghaghaqa qulemteggun naghughlleghhii.
aaghlū-Ø esghagh-aqa qule-mteggun naghughte-lghii-Ø
meteor-ABs see-IND(1s-3s) area.above-VL(1p-s) pass.by-INP-ABs
'I saw a meteor passing above us.' (SI-1)
- (94) Mekelghiighhaam agtuqaghaa uguqnalghii qayungllaasiq.
mekelghiigh-ghhagh*-m agtugh-qagh-aa uguqe-nagh-lghii-Ø qayu-ngllagh-(u)sigh-Ø
boy-little.N-RLs touch-briefly.V-IND(3s-3s) burn-causing.V-INP-ABs
tea-make.N-device.for.V-ABs
'A little boy touched the hot kettle unintentionally.' (SI-11)
- (95) Aagna aghulaqelghii yuuk apeghtughistenguuq.
aag-na-Ø aghulaqe-lghii-Ø yug-Ø apeghtugh-i-ste-(ng)u-uq
over(D:E)-na-ABs leave-INP-ABs man-ABs teach-HALF.TR-habitual.V-er-be.N-IND(3s)
'The man who has just left is a teacher.' (SI-2)

As a VN postbase, the TRP ending derives a noun that must be possessed. This VN postbase can be translated as 'the one possessor V-ed'. Examples of the nominal use of the TRP are 96-98.

- (96) neghengkilanga
 negh-nghit^he-ka-(ng)a
 eat-NEG-TRP-AB(3s-s)
 'the one he did not eat' (JAc-57)
- (97) (...) nuugtenka utaqakenka (...)
 nuugte-nka utaq-ke-nka
 surface-habitual.V-er-AB(1s-p) wait.for-TRP-AB(1s-p)
 '(...) my (surfacing) seals that I have been waiting for (...) ' (NBK/1-10)
- (98) pegtaa uyughani tasluqsagenni
 pegte-aa uyughagh*-ni tasluqe-yagh-ke-ni
 release-IND(3s-3s) younger.sibling-AB(3Rs-s) hold.hands.with-V.in.vain-
 TRP-AB(3Rs-s)
 'he released his little brother's hand which he had been holding' (BAb-153)

Precessive (PRO) mood endings are found in 99 and 100. The sentences in 99 illustrate the possibilities of coreference due to the distinction between third person and 3R person.

- (99) Neghtuq laalighfagilgan.
 negh-tuq laaligh-te-vagilgan
 eat-IND(3s) visit-PRO(3s)
 'He_i ate before he_i visited.'
- Neghtuq laalighfagilgami.
 ... [PRO(3Rs)]
 'He_i ate before he_i visited.'
- Neghtuq laalighfagilgagu.
 ... [PRO(3s-3s)]
 'He_i ate before he_i visited him_k.'
- Neghtuq laalighfagilgamigu.
 ... [PRO(3Rs-3s)]
 'He_i ate before he_i visited him_i.'

Neghtuq laalighfagilgatni.

... [PRO(3s-3Rs)]

'He_i ate before he_j visited him_i.' (JAc-65)

- (100) Kaatfagilgama neghegkaaguq.

kaate-vagilgama negh-kau-guq

arrive-PRO(1s) eat-PST-IND(3s)

'Before I arrived, he had eaten.' (JA-82)

Neghtuq laalighfagilgavek.

negh-tuq laalighte-vagilgavek

eat-IND(3s) visit-PRO(2s)

'He ate before you visited.' (JAc-65)

A Consequential (CQO) mood ending is found in example 101.

- (101) Tagiyan quyakaqa.

tagi-yan quyake-aqa

come-CQO(3s) be.happy.about-IND(1s-3s)

'When he came I was happy on account of it.' (JA-79)

A Conditional (CDO) mood ending is found in example 102.

- (102) Qepghaghyukuvek qepghaghhaaten.

qepghagh-yug-kuvek qepghagh-gga-uten

work-want.to.V-CDO(2s) work-FUT.OPT-IND(2s)

'If you want to work, go ahead and work.' (JA-80)

A Concessive (CSO) mood ending is found in example 103.

- (103) Neghtunga iyatanghiteghngaaghma.

negh-tunga iyatagh-nghit^oe-ghngaaghma

eat-IND(1s) be.hungry-NEG-CSO(1s)

'I ate even though I wasn't hungry.' (JAc-66)

A Contemporative I (CIO) mood ending is found in example 104.

- (104) Laalighneghminigu quyaauq.
 laalighte-neghminigu quya-aqe-uq
 visit-C10(3Rs-3s) be.happy-PROG-IND(3s)
 'Whenever he_i visits her, he_i is happy.' (JAc-69)

The Contemporative 2 (C2O) mood has not been previously reported for CSY. Its ending is formally cognate with the CAY C2O mood ending (Woodbury 1981:137; Jacobson 1984:605), but it has a different meaning, since the CAY form means 'while...' rather than 'only when'. A CSY example is 105.

- (105) Maklagtengninaneghmeggnullu llaagmegteggun kapughaqelghiit.
 maklag-te-(ng)inaneghmeggni=llu llaag-megteggun kapugh-aqe-lghiit
 bearded.seal-catch.N-C2O(3Rp)-also joint-VL(3Rp-p) tattoo-PROG-
 INP(3p)
 'And only when they get a bearded seal they tattoo their joints.' (NBK/7-49)

The Volitive of Fear (VFO) mood has not been previously reported either. It does not appear to exist in any other Eskimo language. The term "Volitive" is used by Palmer (1986:12, 115) to express modalities of hope, fear, regret, and desire. Badten et al. (1987:288) interpret this mood ending as consisting of a postbase *-nayu-* 'may subject not V', immediately followed by CDO mood endings. I consider this interpretation to be incorrect on the grounds that the person endings following *-nayuka-* are quite different from the ones following the CDO mood marker, as shown in Menovshchikov (1967:171-73). A discussion of the etymology of *-nayuka-* is provided in chapter 2. Examples of the VFO mood are 106-108.

- (106) Repall alingumaanga tuqunayukama.
 repall alinge-(i/u)ma-unga tuqu-nayukama
 consequently be.afraid-PST-IND(1s) die-VFO(1s)
 'I was very afraid that I would die.' (NBK/6-12)

- (107) *yuuk nallungughtekaq asighngaaq qapraghlagayukan tawaten*
kiyaghtestaqaat
yug-Ø nallungughte-kagh-Ø asighnga-uq qaprag-ghlag-nayukan tawa-ten
kiyaghte-(te)ste-aqe-aat
 person-ABS be.incoherent-one.that.has.V-ed-ABS be.tied.up-IND(3s)
 move.around-V.in.a.big.way-VFO(3s) there(DA:R)-EQ live-CAUS-
 PROG-IND(3p-3s)
 'the mentally disturbed person is in restraints to prevent him from engaging in
 harmful physical activity' (JAa-50)
- (108) *Gaaringhi ghhuughemllu simighaqluki naavumanayukata, (...)*
gaarinegh-(ng)i ghhuugh-m=llu simigh-aqe-luki naave-(i/u)ma-nayukata
gun.powder-AB(3s-p) bullet-RLs-also replace-PROG-APO(3p-3p)
be.ruined-PST-VFO(3p)
 'They would also replace the cartridges (of whaling bomb guns), in case they
 had gone bad, (...)' (APb-134)

The Participial Oblique moods appear to exist only in CSY and in the CAY dialect of Nunivak. Intransitive Participial Oblique (IPO) and Transitive Participial Oblique (TPO) endings are etymologically derived from the INP and TRP mood markers, respectively *-lghii-* and *-ke-*, preceded by an element *+yagh-* (probably from the postbase *-yagh-* 'to V in vain'). The IPO is thus *+yalghii-* (partially described in Menovshchikov (1967:151) and the TPO *+yaqe-* (never before described).

Like the Consequential mood, the Participial Oblique moods often seem to be translatable as 'when (in the past)'; the difference between the two lies in the discourse function of the Participial Oblique. Against the background of the subordinate clause in the Participial Oblique mood, the main clause describes an event focused on because it is unexpected or contains an element of surprise. As a result, the Participial Oblique moods are more accurately translated as 'it was the fact (in the past) that..., but...'; 'until now...'; 'now that...', and the main clause often contains interjections expressing excitement, particles meaning 'already', or the postbase *-fte-/pete-* 'to apparently V'. In addition, the clause in a Participial Oblique mood often contains particles such as *taagken* 'next; and then' or *legan* 'and so', emphasizing continuity with preceding events. Thus, the Participial Oblique moods prevent the focus of attention from being shifted toward the subordinate clause and away from the continuity of events or story line described by the main clause. They are used in vivid narrative, such as traditional stories, but also in conversation.

In other Eskimo languages, the Appositional mood can have the function of the CSY Participial Obliques in narrative, and even in CSY, there is sometimes hesitation between the two, as shown in example 114.

Examples of the Intransitive Participial Oblique (IPO) mood are 109-114.

- (109) Kaasalghiimi Pangawyi ayveghaamalghii.
 kaasalghiimi Pangawyi-Ø ayvegh-agh-(i/u)ma-lghii
 arrive-IPO(3Rs) Pungowiyi-ABs walrus-get.N-PST-INP(3s)
 'When Pungowiyi got back he had gotten a walrus.' (NBK/8-65)
- (110) (...) uteghmun qiivyalghiimeng kii ukanguq qaygegteqrugluni
 ukikrugumalghii.
 uteghmun qiive-yalghiimeng kii uka=nguq qaygegte-qrug-luni ukig-qrug-
 (i/u)ma-lghii
 homeward turn.body-IPO(3Rp) gee near(DA)-it.is.said reach.the.top-
 darn.one.V's-APO(3s) go.down-darn.one.V's-PST-INP(3s)
 '(...) when they looked back, gee! that darn one, having reached the top, was
 coming down.' (SEP-9)
- (111) naaygham minglenga paga aliightuq tagitugiisalghiimi
 naayghagh-m mingle-(ng)a paga aliigh-tuq tagitug-(ng)iite-yalghiimi
 mountain-RLs wall-AB(3s-s) up(DA:E) clear.up-IND(3s) fog-become.N-
 less-IPO(3Rs)
 'the lower part of the mountain can be seen now that the fog has lifted some'
 (BAB-143)
- (112) Unaami taghtughyalghiimi, nighughtaghaghaqeftaa.
 unaagh-mi taghtugh-yalghiimi nighughte-ataghagh-aqe-fte-aa
 morning-LCs wake.up-IPO(3Rs) become.bright-V.more-PROG-
 apparently.V-IND(3s-3s)
 'When he woke up in the morning, it had started to dawn.' (MEc-151)
- (113) Mamlegpetuq esghaghyalghiinga.
 mamleg-pete-uq esghagh-yalghiinga
 be.dark-apparently.V-IND(3s) see-IPO(1s)
 'It was dark when I opened my eyes.' (SI-48)

- (114) Maana maavek lliighyalghiifsi quyngighqwaaghmeng maavek lliighlusi,
 Ayvigteghmi nelkagtusi?
 maa-na-Ø maa-vek lliigh-yalghiifsi quyngigh-qwaagh-meng maa-vek
 lliigh-lusi Ayvigtegh-mi ne-lkagh-tusi
 here(D:E)-na-ABs here(DA:E)-TM become.a.certain.way-IPO(2p)
 reindeer-herding.of.N-MDs here(DA:E)-TM become.a.certain.way-
 APO(2p) Ayvigteq-LCs home-build.N-IND(2p)
 'When you moved here for reindeer hunting, did you build your home in
 Ayvigteq? (NBK/3-42)

Examples of the Transitive Participial Oblique (TPO) mood are 115-121.

- (115) Kaasaqminigu elngaatal, qengaghugem qaayngani aqumluni
 qalghiighaqeftuq.
 kaate-yaqminigu elngaatal qengaghug-m qaye-(ng)ani aqume-luni
 qalghigh-aqe-fte-uq
 arrive-TPO(3Rs-3s) extra snowdrift-RLs top-LC(3s-s) sit-APO(3s) sing-
 PROG-apparently.V-IND(3s)
 'When he got to it, it (the bird), sitting on top of the snowdrift, was singing.'
 (NBK/7-3)
- (116) Meaning-engiteftutqun igaghyaqmeqtengnga.
 meaning-(ng)it'e-fte-ut=qun igagh-yaqmeqtengnga
 (English)-lack.N-apparently.V-IND(3p)-see tattoo-TPO(3Rp-1s)
 'At the time that they tattooed me, they (tattoos) did not have meaning.'
 (NBK/7-46)
- (117) (...) naayeng esghaghyaqmeqtEGgu aghnalqwaaghmalghii.
 naa-yeng esghagh-yaqmeqtEGgu aghnagh-lqwaagh-(ng)u-(i/u)ma-lghii
 mother-IND(3Rp-s) see-TPO(3Rp-3s) woman-old.N-be.N-PST-INP(3s)
 '(...) when they saw their mother she had become an old woman.' (NBK/6-
 46)

- (118) (...) aruughumalunga esghaghyaqegka taawa nulughaqeftuq Nekrugun.
 aruugh-(i/u)ma-lunga esghagh-yaqegka taawa nulugh-aqe-fte-uq
 Nekrugute-Ø
 watch-PST-APO(1s) see-TPO(1s-3d) there ice-fish-PROG-apparently.V-
 IND(3s) Bernard-ABS
 '(...) when I was looking (at the ice edge), there was Bernard fishing.'
 (NBK/1-53)
- (119) (...) alla ateghsaqenka pilaataghtunga.
 alla ateghte-yaqenka pi-laatagh-tunga
 again let down-TPO(1s-3s) get-V.one more time-IND(1s)
 '(...) when again I dipped them (my hooks) I got one again (fish).'
- (120) (...) aglaalluki gaaghyaqepung taawa yunguusimalghiit aawallu
 aglagh-(u)te-luki gaagh-yaqepung taawa yug-(ng)u-uute-(i/u)ma-lghiit
 aawa=llu!
 go.home-TR-APO(1d-3p) cook-TPO(1d-3p) there person-be.N-
 V.as.a.group-PST-INP(3p) already-also
 '(...) taking them home (eggs) when we cook them, it turns out they had
 already begun to form birds in there!' (NBK/4-70)
- (121) Tungsighyaghtughyaqevgunuq neghumakanga.
 tungsigh-yaghtugh-yaqevgu=nguq negh-(i/u)ma-kanga
 ask.for-go.and.V-TPO(2s-3s)-it.is.said eat-PST-TRP(3s-3s)
 'When you went to ask for it, he had eaten it.' (NBK/5-35)

1.6.3.4. Derivational Morphology

Derivation in CSY consists of a large number of suffixes which are called postbases in the linguistic literature on Eskimo. Postbases are most often productive and semantically transparent, and can be added one after another in sequences of usually two or three, the maximum encountered being seven. These sequences are relatively short in comparison to other Eskimo languages, such as CAY, where one can find more than six postbases in a word (Woodbury 1981:300; Jacobson 1984:423), and where it is possible to have more than a dozen (Miyaoka [1975]:57).

Following the seminal work of Kleinschmidt (1851:108-9), but using the modern terminology of Woodbury (1981:342-43), postbases can be classified into

four basic categories: those deriving nouns from verbs (VN), for example *-(s)te-* (131), *-yaghqagh-* (131), *-(u)sigh-* (132); those deriving verbs from nouns (NV), for example *-ke-* (128), *-lgu-* (129), *-ngllagh-* (130), *-(ng)ughte-* (131), *-(ng)it^oe-* (132), *-(ng)u-* (133); those elaborating nouns into more complex nouns (NN), for example *-rukutaagh-* (122), *-ghllag-* (122, 129, 133), *-yag-* (123), *-ghrugllag-* (130), *-ghhagh** (132); and those elaborating verbs into more complex verbs (VV), for example *-(u)te-*, *-laatagh-* (124), *-lleqe-* (125), *-pigllag-*, *-kayugu-*, *-fte-* (126), *-yaghtugh-* (127), *-nghit^oe-* (127, 130), *-yagh-* (127), *-yug-* (130), *-niigh-* (131).

From a semantic and grammatical point of view, Eskimo postbases can indicate a wide variety of phenomena, including, for nouns, quantification (*-yag-* [123], *-ghllag-* [133]), adjectival modification (*-rukutaagh-* [122], *-ghllag-* [122, 129], *-ghrugllag-* [130], *-ghhagh** [132]), being and becoming, (*-(ng)ughte-* [131], *-(ng)u-* [133]), a type of verbal noun-incorporation (*-lgu-* [129, 134], *-ngllagh-* [130]), and for verbs, changes in transitivity (*-(u)te-* [124]), adverbial modification (*-pigllag-* [126], *-yagh-* [127]), aspect (*-laatagh-* [124], *-niigh-* [131]), evidentiality (*-fte-* [126]), modality (*kayugu-* [126], *-yug-* [130]), negation (*-nghit^oe-* [127, 130]), tense (*-lleqe-* [125]), agent noun formation (*-(s)te-* [131]), relative clause formation (*-yaghqagh-* [131]), and various types of verbal complementation (137-153).

- (122) qawaagpagrukutaaghlak
 qawaagpag-rukutaagh-ghllag-Ø
 legendary large bird-huge.N-big.N-ABs
 'huge big (legendary large) bird' (NBK/6-44)
- (123) meteghlugyaget
 meteghlug-yag-t
 raven-multitude.of.N-RLp
 'a lot of ravens' (NBK/Ø-64)
- (124) itemullaataamii
 iteme-(u)te-laatagh-(i/u)ma-ii
 come undone-TR-V again-PST-IND(3s-3p)
 'he has freed them again' (SLb-7)

- (125) Esghaghllleqamken unaami.
 esghagh-lleqe-amken unaagh-mi
 see-FUT-IND(1s-2s) morning-LCs
 'I will see you tomorrow.' (NBK/Ø-36, 51)
- (126) iflapigllakayuguftuq
 ifla-pigllag-kayugu-fte-uq
 get.lost-really.V-able.to.V-appear.to.V-IND(3s)
 'he appears to be able to get really lost' (NBK/3-41)
- (127) aqelqaghniighyaghtunghisaghamken (...)
 aqelqaghniigh-yaghtugh-nghit⁰e-yagh-amken
 challenge.guests-go.and.V-NEG-V.in.vain-IND(1s-2s)
 'I did not come to challenge you, but...' (NBK/3-51)
- (128) Miinglum ighneqaanga.
 Miinglu-m ighnegh-ke-aanga
 Clarence-RLs son-have.as.one's.N-IND(3s-1s)
 'I am Clarence's son' (lit., 'Clarence has me as a son'). (NBK/4-12)
- (129) mangteghaghllalguuq
 mangteghagh-ghllag-lgu-uq
 house-big.N-have.N-IND(3s)
 'he has a big house' (BAB-281)
- (130) mangteghaghrugllanglaghyunghitunga
 mangteghagh-ghrugllag-ngllagh-yug-nghit⁰e-unga
 house-big.N-make.N-want.to.V-NEG-IND(1s)
 'I did not want to make a big house' (JAC-33)

As shown in examples 131-133, there can be switches back and forth between verb and noun bases by successive derivations with VN and NV or VN and NV sequences.

- (131) unangniightengughsaghaq
 unange-niigh-(s)te-(ng)ughte-yaghqagh-Ø
 catch.a.seal-habitually.V-one.who.Vs-become.N- someone.who.will.V-ABs
 'one who ought to become a hunter' (MEc-195)
- (132) sangusighhiisin?
 sa-(ng)u-(u)sigh-ghhagh*-(ng)it^oe-zin
 something-be.N-instrument.for.V-ing-little.N-not.have.N-INT(2s)
 'don't you have a little device for being something (i.e., a weapon)?'
 (NBK/6-28)
- (133) anglivigllaguug
 angli-vig-ghllag-(ng)u-uq
 make.a hole-place.to.V-lots.of.N-be.N-IND(3s)
 'there are lots of places to make a (fishing) hole' (NBK/5-61)

1.6.3.5. Interaction of Derivational Morphology and Syntax

The ways postbases can be added to a base and to one another have been called an "internal syntax," a term first applied to Nootka by Swadesh (1939) and then to Greenlandic Eskimo (Swadesh 1946:50). Internal syntax contrasts with the "external syntax," which deals with the relationships between and arrangements of independent words.

Even though internal and external syntax can be described as formally discrete systems, such a description would give an inaccurate picture of CSY grammar as a whole, and therefore the cover term "syntax" is indeed appropriate. If one takes a point of view emphasizing grammatical processes rather than looking at the arrangement of forms in words and sentences, it becomes clear that internal and external syntax are not discrete, but interact in many ways.

It is not the goal of this subsection to describe or even classify all the kinds of possible interactions, since that would require a study by itself, nor is it to draw theoretical implications, for which one should refer to chapters 2 and 6. The remainder of this subsection identifies various types of interaction and provides illustrative examples.

Noun phrases in the Modalis case can modify a noun that is incorporated into a verb with an NV postbase. This type of interaction has been often discussed in the literature on Eskimo, in particular by Sadock (1980, 1985, 1991:91-99). A CSY example is 134.

- (134) Qikmighrugllalguunga maaghraghvinlegneng.
 qikmigh-ghrugllag-lgu-unga maaghraghvinleg-neng
 dog-big.N-have.N-IND(1s) seven-MDp
 'I have seven big dogs.' (JAc-91)

Some VN postbases can be used as infinitive, gerundive, or embedding complementizers occurring on the lower verb, the choice of postbase depending on the particular semantic class of the higher verb involved. The VN postbase *-negh-* 'act of V-ing', obligatorily followed by a MDs case ending, functions like an infinitive or gerundive complementizer when the higher verb is 'to finish' or 'to be unable to'. Examples are 135 and 136.

- (135) Neneghmeng taaqegkumta kiighqughlleqanka.
 negh-negh-meng taaqe-kumta kiighqugh-lleqe-anka
 eat-act.of.V-ing-MDs finish-CDO(1p) split-FUT-IND(1s-3p)
 'I'll cut them (fish) after we eat (i.e., when we finish eating).' (HEN-18)
- (136) Aghtughtunga maanangllaneghmeng.
 aghtugh-tunga maa-na-ngllagh-negh-meng
 be.unable.to-IND(1s) here(D:E)-na-make.N-act.of.V-ing-MDs
 'I can't make this.' (NBK/5-31)

The VN postbase *-ute-* (allomorph *-uta-* used with third person possessor endings) 'condition of possessor with respect to his/her/its act or state of V-ing', obligatorily occurs with a possessed AB case ending (Jacobson 1990a:87-88). It functions like a complementizer marking the lower verb as the head of an embedded clause, and is translatable as 'whether'. The higher verb is thus syntactically (but not morphologically) embedding, and is a verb of inquiry or cognition, such as 'to ask', 'to know', 'to not know', or 'to wonder'.

- (137) Aaptaanga kaasimaten.
 aapte-aanga kaate-(i/u)ma-(u)te-n
 ask-IND(3s-1s) arrive-PST-condition.of.possessor.with respect.to.V-AB(2s-s)
 'He asked me whether you had arrived' (lit., 'He asked me about your condition of arrival'). (JAc-88)

If the embedded verb is lexically transitive and has an external NP subject, this subject must be expressed in the TM case, and is thus an oblique argument. This external NP subject, which may or may not be coreferential with the subject of the embedding verb, is usually not, for obvious semantic reasons. An example is 138.

- (138) Aaptaanga elpenun neghumatanga iqalluk.
 aapte-aanga ell-penun negh-(i/u)ma-(u)ta-(ng)a iqallug-Ø
 ask-IND(3s-1s) PN-TM(2s) eat-PST-
 condition.of.possessor.with.respect.to.V-AB(3s-s) fish-ABs
 'He asked me whether it was you who had eaten the fish' (lit., 'He asked me
 about its condition of being eaten by you'). (JAc-88)

Other examples of *-ute-* / *-uta-*, with various embedding verbs, are 139-141.

- (139) Sangutanga liisimaksigu?
 sa-(ng)u-(u)ta-(ng)a liisimake-zigu
 what-be.N-condition.of.possessor.with.respect.to.V-AB(3s-s) know-
 INT(2s-3s)
 'Do you know what this is?' (NBK/10-42)
- (140) Nallukngwaaghaqa piyaghqaatka.
 nalluke-(ngw/w)aagh-aqa pi-yaghqau-(u)te-ka
 not.know-completely.V-IND(1s-3s) go-be.supposed.to.V-
 condition.of.possessor.with.respect.to.V-AB(1s-s)
 'I don't know at all whether I should go.' (NBK/7-27)
- (141) Sumeghtaghaghqunga akuutaghyuguten.
 sumeghtaghagh-aqe-unga akuutagh-yug-(u)te-n
 think-PROG-IND(1s) Eskimo.ice.cream-want.N-
 condition.of.possessor.with.respect.to.V-AB(2s-s)
 'I wonder if you would care for some Eskimo ice cream.' (NBK/4-61)

The class of VV postbases called compound-verbal postbases are morphologically embedding and are semantically equivalent to complement-taking verbs in more analytic languages. Thus, these postbases are added to verbs that function like embedded verbs which are heads of embedded clauses. Compound-verbal postbases include *-ni-* 'to say that one is V-ing or being V-ed', *-sqe-* 'to want one to V; to ask one to V', as well as several causative postbases (given under division A. 1.2.1.2 in

subsection 2.5.3 of chapter 2). As shown by Jacobson (1979:88), both the embedded verb and the compound-verbal postbase can be intransitive or transitive. When the compound-verbal postbase is intransitive, the form is like example 142, and the meaning is ambiguous, depending on whether the embedded verb is intransitive (a) or transitive (b). Similarly, when the compound-verbal postbase is transitive, the form is like example 143, and the meaning is ambiguous, again depending on whether the embedded verb is intransitive (a) or transitive (b).

- (142) neghyugniiq
 negh-yug-ni-uq
 eat-want.to.V-say.that.V-IND(3s)
 (a) 'he_i said that he_i wants to eat'
 (b) 'he_i said that something wants to eat him_i' (JA-88)

- (143) neghyugnii
 negh-yug-ni-aa
 eat-want.to.V-say.that.V-IND(3s-3s)
 (a) 'he_i said that he_j wants to eat'
 (b) 'he_i said that something wants to eat him_j' (JA-88)

The picture is different when one looks at the whole embedded clause instead of just the embedded verb. The corresponding embedded clause is always intransitive, regardless of whether the embedded verb is lexically transitive, as shown in Woodbury (1985). As in the case of the VN postbase *-ute- / -uta-* discussed above, if the embedded verb is transitive and has an external NP subject, it will be marked with the TM case, as seen in examples 144-146. This TM case-marked external NP is an oblique argument, since nonoblique transitive subjects are marked with the RL case.

- (144) Yuuk nanumun neghyugniiq.
 yug-Ø nanugh*-mun negh-yug-ni-uq
 man-ABs polar.bear-TMs eat-want.to.V-say.that.V-IND(3s)
 'The man_i said that the polar bear wants to eat him_i.' (JA-88)
- (145) Yugem nanumun neghyugnii aghnaq.
 yug-m nanugh*-mun negh-yug-ni-aa aghnagh-Ø
 man-RLs polar.bear-TMs eat-want.to.V-say.that.V-IND(3s-3s) woman-ABs
 'The man said that the polar bear wants to eat the woman.' (JA-88)

I constructed 146 as an example containing a TM case-marked noun phrase coreferential with the subject of the embedding verb. Parallel CAY examples are given in Jacobson (1984:520).

- (146) *Mayeraaghpagem ellminun neghyugnii aghnaq.
 mayeraagh-pag-m ell-minun negh-yug-ni-aa aghnagh-Ø
 giant-big.N-RLs PN-TM(3Rs) eat-want.to.V-say.that.V-IND(3s-3s)
 woman-ABs
 'The giant said that he himself wants to eat the woman.'

Examples with the compound-verbal postbase *-sqe-* are found in 147 and 148.

- (147) Yugem anengamnun neghesqaa kayu.
 yug-m anengagh-mnun negh-sqe-aa kayu-Ø
 man-RLs older brother-TM(1s-s) eat-ask.to.V-IND(3s-3s) fish-ABs
 'The man asked my brother to eat the fish.' (JA-32)
- (148) John-em ighivgaqun tagliisqaqaanga (...)
 John-m ighivgaqun taglagh-sqe-aqe-aanga
 John-RLs this evening go.up-ask.to.V-PROG-IND(3s-1s)
 'John told me to come this evening (...)' (HEN-22)

Another, actually more common, construction with the postbases *-ni-* and *-sqe-* is one where they function as complementizers, in effect marking the embedded verb as the head of an embedded clause. The higher verb is thus syntactically but not morphologically embedding. Since the higher verb is a particularization of the meaning of *-ni-* and *-sqe-*, the postbases themselves have little semantic import, and are translatable as '(saying) that' and '(asking) that'. Thus, with *-ni-*, the higher verb is a verb of communication such as 'to hear' or 'to tell'; and with *-sqe-*, the higher verb is one meaning 'to ask' or 'to urge'. This construction is very similar to the one involving complementation with the VN postbase *-ute-* / *-uta-*. Here, also, the postbase with a complementizer function cannot be followed by another postbase, and there is no choice as to what inflection has to follow. Of course, the difference is that with *-ni-* and *-sqe-*, the embedded clause is not nominalized, but is inflected in the APO, a predicative mood.

Examples with *-ni-* are 149 and 150.

- (149) Nagaqughaqa naallghusimaniluku qepghaghaqughnguq.
 nagaqugh-aqa naallghute-(i/u)ma-ni-luku qepghagh-aqe-uq=nguq
 hear-IND(1s-3s) heal-PST-say.that.V-APO(3s-3s) work-PROG-IND(3s)-
 it.is.said
 'I heard that he recovered and is working.' (HEN-7)
- (150) John-em ungipaataanga yughaghta kaannaqniluku.
 John-m ungipagh-(u)te-aanga yughagh-(s)te-Ø kaate-naqe-ni-luku
 John-RLs tell.a.story-TR-IND(3s-1s) pray-one.who.Vs-ABs arrive-
 PROSP-say.that.V-APO(3s-3s)
 'John told me that the minister is going to arrive.' (HEN-9)

Examples with *-sqe-* are 151-153.

- (151) Aapleqaqa ighneqa aglaatesqellutung.
 aapte-lleqe-aqa ighnegh-ka aglagh-(u)te-sqe-lutung
 ask-FUT-IND(1s-3s) son-AB(1s-s) go.home-V.with-ask.to.V-APO(1s-1d)
 'I'll ask my son if he can take us.' (HEN-16)
- (152) yugem aghnaq muutivikaa ayapghaatanglliisqelluni
 yug-m aghnagh-Ø muute-i-vike-aa ayapghaatagh-ngllagh-sqe-luni
 man-RLs woman-ABs ask.to.do.for-HALF.TR-
 have.an.object.of.one's.V-ing-IND(3s-3s) mitten-make.N-ask.to.V-
 APO(3s)
 'the man asked the woman to make him mittens' (BAB-119)
- (153) Panika qelqelleqaqa kayusiitesqellutung.
 panig-ka qelqe-lleqe-aqa kayusigh-(u)te-sqe-lutung
 daughter-AB(1s-s) urge-FUT-IND(1s-3s) help-V.with-ask.to.V-APO(1s-
 1d)
 'I'll urge my daughter to help us.' (HEN-16)

At least for *-sqe-*, it is not the case that, when the APO mood is used, the higher verb *must* be a particularization of the meaning of the embedded postbase, since there are cases where the higher verb is not semantically close to the meaning of this postbase, as seen in example 154, where the higher verb means 'to aim'. In such cases, *-sqe-* cannot be semantically viewed as a complementizer.

- (154) qiiinghuta taghnughhani esghiiisqelluku whangkunnun
 qiiinghute-aa taghnughhagh*-ni esghagh-sqe-luku whang-kute-nun
 aim-IND(3s-3s) child-AB(3Rs-s) see-ask.to.V-APO(3s-3s) PN1-PL-MDp
 'she aimed the baby at us, letting us see it' (BAb-188)

The VV postbase *-na-* basically means 'to want to V', and can also function like a complementizer, translatable as '(wanting) to' or 'in order to V'. However, unlike the constructions involving the postbases *-ni-* and *-sqe-*, *-na-* must be followed by an APO mood, regardless of whether it actually functions as a complementizer. Furthermore, when *-na-* functions like a complementizer, the higher verb does not have to belong to any particular semantic class. In example 155, *-na-* does not function as a complementizer and thus does not mark the head of a syntactically embedded clause.

- (155) Esghaghnaluku qinuyulghii yuuk.
 esghagh-na-luku qinuyug-lghii-Ø yug-Ø
 see-want.to.V-APO(3s-3s) be.sick-INP-ABs person-ABs
 'He wants to see the sick person.' (HEN-9)
- (156) Ingaghtuq qavaghnaluni.
 ingaghte-uq qavagh-na-luni
 lay.down-IND(3s) sleep-in.order.to.V-APO(3s)
 'He lay down in order to sleep.' (BAb-287; JAc-76)
- (157) John aapsimayaghaqa atughnaluku trailer-kek.
 John-Ø aapte-(i/u)ma-yagh-aqa atugh-na-luku trailer-kek
 John-ABs ask-PST-V.in.vain-IND(1s-3s) use-in.order.to.V-APO(1s-3s)
 (English)-AB(3s-d)
 'I asked John if I could use his trailer.' (HEN-10)

1.7. Spelling Conventions for Native Languages Other than CSY

Forms quoted in other Eskimo languages are given in the standard orthographies for the languages of Alaska, Canada, and Greenland. For Soviet Yupik languages other than CSY, the Cyrillic orthography was respelled into the CSY orthography, with a few modifications for every single language. Sireniksi is spelled as in CSY, with the addition of *c* for /č/, and *ʔ* for /ʃ/. Naukanski and Imakliksi have the phonemes /e/ and /o/ (in Imakliksi probably only in borrowings

from Chukchi or Naukanski), for which *e* and *o* were used; therefore *ə* had to be used for /ə/, corresponding to CSY and Sireniksi *e*. Imakliksi is otherwise respelled like North Alaskan Inupiaq, with the addition of *ʔ* for /ʔ/.

For Chukchi, there exists no agreed spelling in the Latin alphabet; a transliteration from the Cyrillic standard spelling system was not adopted since the idiosyncracies of that system give a rather poor idea of Chukchi phonology. I adopted a broad transcription, with the symbols *a e ə g i k l m n ŋ o p q r s t u w y ʔ* for the phonemes /a ě e ə γ i k l m n ŋ o p q r s t u w y ʔ/, the values of which are straightforward. Two concessions to the Soviet orthography were made: /s/ is treated like a phoneme, even though it only occurs in Russian loans and is otherwise an allophone of /š/ before /q/. What would appear, according to the standard Soviet spelling, to be a sequence /ʔV/ is often actually /Vʔ/. There is no way to be sure of what sequence is intended, and therefore my orthographic symbol "'''' is always placed in the exact position of the soft sign, hard sign (postconsonantly), or apostrophe (preconsonantly), which represents this sound in the Cyrillic system. For Alutor, Kerek, and Koryak the same letters are used, with the occasional addition of *v* for /v/ and *h* for /h/.

The Central Siberian Yupik Verbal Postbases

In this chapter, I propose a new approach to VV postbase ordering and outline a new comprehensive classification of the productive VV postbases of CSY, based on this approach. The reasons for concentrating on VV postbases are the following: This work concentrates primarily on the relationship between independent particles and postbases rather than on the grammar of postbases per se. With a few exceptions, it is only the VV postbases that interact in interesting ways with the particles. This is not surprising since particles are mainly adverbial and conjunctive, and so are the VV postbases. The type of classification given in section 2.5 of this chapter maximizes the comparability of VV postbases with particles. The relationship, synchronic as well as diachronic, found between particles and postbases, will be treated at length in chapter 6.

Another reason for concentrating on VV postbases is that in this chapter I also consider postbase ordering a topic particularly relevant to VV postbases, since long and complicated sequences of VV postbases are a lot more common than long sequences involving NN, NV, or VN postbases.

2.1. Issues in Eskimo Postbase Grammar

I do not trace in detail the history of Western studies in postbase grammar and classification since a detailed treatment of it is given in Woodbury (1981:302-25). I do, however, give a brief account of the way theories of morphology have affected the VV postbase grammar.

In recent linguistic theory, two opposing views of a relationship between the "internal syntax" and the "external syntax" have emerged. The *lexicalist* hypothesis (Chomsky 1970) implies that the "internal syntax" is a coherent and autonomous component of Eskimo grammar which is different in nature from the clause or sentence level (or "external") syntax. This view has been defended by Woodbury (1981) for CAY, by Fortescue (1979, 1980) and Denny (1989) for Greenlandic, and by Grimshaw and Mester (1985) on the basis of Labrador Inuit data. The *syntactic* position views at least some postbases as syntactic formatives on the same level as the bases to which they are affixed and some postbases as transformationally inserted elements. Scholars who have argued for this syntactic view include Rischel (1971)

and Sadock (1980) for Greenlandic, Woodbury (1985) for CAY, and Smith (1979, 1980, 1981, 1982, 1982a) for Labrador Inuit. Woodbury's and Sadock's reply (1986) to Grimshaw and Mester, using supplementary evidence from CAY and Greenlandic, is a recent and convincing summary of the syntactic position.

One can conclude that there are powerful arguments for both positions and that, at least as far as VV postbases are concerned, some would have to be accounted for by transformational insertion, while some could just as well be accounted for by the lexicalist hypothesis.

The lexicalist and syntactic views referred to above were not primarily concerned with affix order. Most recent theories of morphology, such as the ones of Kiparsky (1982), Selkirk (1982), Baker (1985), Bybee (1985), and Pesetsky (1985), include statements on affix order. Their statements have been summarized by Muysken (1986:630-33). It appears that only a few of the statements or principles of these theories are relevant or useful for a language as polysynthetic as Eskimo. This is not surprising since the number of affixes and affix combinations occurring in Eskimo is quite unusual, and since the theories were primarily constructed on the basis of data from more analytic languages.

2.1.1. Soviet Approaches

Of some recent Soviet work relevant to postbase grammar, Menovshchikov's two-volume grammar (1962, 1967) is the most important and extensive Soviet description of CSY. His work has been subjected to a severe, but accurate, critique by Ulving (1971), with an additional comment by Krauss (1976:192). I must agree with Ulving and Krauss on the various points which limit this grammar's usefulness regarding morphology and verbal morphology in particular. In a disturbing number of places, the boundaries of morphemes have been wrongly delimited, to the point that many morphemes are difficult to recognize when given in isolation, at least to somebody accustomed to forms as given in Badten et al.'s 1987 dictionary. This is not a matter of analytical or theoretical preferences, but rather a serious defect, as shown by the examples in Ulving (1971:97-112). Even the relatively easily isolable tense and mood suffixes are delimited in a way that would require the postulation of an unlikely and unnecessary amount of morphologically conditioned allomorphs, as shown by Ulving's charts (1971:98-99).

It appears that these pervasive cases of faulty analysis are due to an ignorance of the system of morphophonological processes typical of Eskimo affixation. It is true that these processes are generally complicated, and depart from quite abstract representations; but no description, even one with pedagogical purposes (and

Menovshchikov's grammar is not pedagogical), could do without them. Faulty delimitation also occurs because Eskimo morphemes are assumed to have a CV or CVCV syllabic shape, an assumption without empirical justification whatsoever. Since CSY morphemes are built of various sequences of segments, with total disregard for syllable boundaries, they may or may not correspond to syllables or syllable sequences. A third reason for faulty delimitation is that Menovshchikov ignores vowel length, thereby obscuring important morphophonological processes.

Ulving (1971:112-18) also points out several important unidentified suffixes. These seem to be mainly short postbases, such as the NV *-ke-* 'to have as one's V' or the VV *-(u)te-* '(transitivizer)'. Since such suffixes are somewhat harder to recognize when undergoing morphophonological processes, they either are misanalyzed as a part or parts of other suffixes or remain mysterious to Menovshchikov.

Another shortcoming of Menovshchikov's grammar is that there is nowhere a complete list of all of the CSY postbases, even though a fairly general, not very accurate, and semantically based classification of postbases and a suffix index are provided. Postbase order is not treated beyond the observation that postbases can occur in long sequences, follow stems, and precede enclitics.

Since Ulving's critical survey of Soviet Eskimo linguistic literature, other works by Soviet authors have appeared, several of which are of particular interest for postbase grammar. Rubtsova (1971) is the most recent and extensive Soviet dictionary of CSY. It contains a valuable list of suffixes (including postbases as well as inflectional endings) on pp. 595-610 which is more extensive than the suffix index in Menovshchikov's grammar (1967:276-84). Another improvement is the marking of vowel length, but it is inconsistent and there is no differentiation between inherent and rhythmic vowel length. This list contains many cases of the wrong delimitation of morphemes discussed with respect to Menovshchikov's 1962 and 1967 work. A very interesting feature of Rubtsova's dictionary is an appendix with a list of 767 words containing the same nominal or verbal base *qimugsigh-* 'dogteam; to go by dogteam', followed by various sequences of postbases and inflectional endings. It is not always clear whether a word is based on the nominal or on the verbal stem, the Russian translations are not always precise enough, and the postbase a particular word is intended to illustrate cannot always be found in the postbase list. Adding to this the fact that many forms are differentiated only by totally predictable inflectional endings, it appears that this impressive collection of examples is not as useful as it could have been for the study of postbase grammar.

Another work of potential interest for VV postbase grammar is Vakhtin's dissertation (1976) on the syntax of the verb, but I have not had access to this work.

Emel'janova's *Verb Classes in the Eskimo Language* (Chaplinski dialect) (1982) is the most recent publication concentrating on verb morphology. It does not refer to Vakhtin's dissertation, apparently because it was completed in 1969. The first chapter of Emel'janova's work deals with the phonological characteristics of verb stems, which are tabulated in terms of their syllabic shapes. It was found that almost all verbs end in the vowel *a* and that the majority of these end in the syllables *ta*, *gha*, or *ga*. Unfortunately, the same errors in delimiting morphemes discussed before are also made here. This final vowel is not a stem-final *a*, but actually the first vowel of the Progressive aspect postbase *-(g)aqe-*, which usually occurs after a verb stem in quotation forms of verbs in Soviet dictionaries. Therefore, it is not surprising to find that most verbs end in such syllables, since most verbs--and actually most CSY words--end in *-gh-*, *-g-*, or *-te-* (where *-te-* and *-a...* become *-ta...* by a regular phonological rule).

In the second chapter, an outline of a partially semantic and partially syntactic classification of verb bases is presented. It is proposed that CSY verbs can be classified with respect to transitivity (i.e., inherently, verbs can be intransitive only, transitive only, or "labile" [intransitive or transitive]), with respect to valence (i.e., the number of places in the argument structure), with respect to the semantic roles involved, and with respect to the morphological marking of transitivity in the verbal inflectional ending.

This classification is then elaborated and exemplified very extensively in chapters 4 and 5, which respectively deal with underived verb stems (i.e., verb stems without potentially valence or transitivity-changing postbases) and verb stems with valence or transitivity-changing VV postbases. Chapter 5 represents a considerable improvement over previous treatments in that it is the first Soviet work to describe almost exhaustively this important group of postbases. Chapter 5 ends with a discussion of "impersonal" verbs, focusing on elemental verbs. Both chapters present an impressive amount of illustrative material, with word-by-word analyses and indications of transitivity, valence, and cases for each verb. However, the value of the description is limited in that there is no overall analysis of correspondences between the semantics of underived verb stem classes and the semantics of the corresponding derived verbs, such as is attempted for the Greenlandic correspondent to *-(u)te-* by Woodbury (1977) and for the CAY correspondent to *-i-* by Miyaoka (1984:205-16). Instead, the semantics of one type of verbs with a particular postbase is described in isolation from the semantics of another type of verb with that same postbase, and vice versa. As a result, the discussion is very repetitive and unenlightening from a theoretical point of view.

Emel'janova's work ends with appendixes containing extensive lists of verb stems classified according to their syllabic structure (pp. 97-115) and lists of verbs classified according to their transitivity (pp. 116-47).

Two other recent Soviet publications relevant to postbase grammar are Menovshchikov and Vakhtin (1983), a pedagogical grammar, and Menovshchikov (1984:41-126), a sketch of the structure of the sentence. These works are actually summaries of Menovshchikov (1962, 1967), and regrettably show no evidence of the progress accomplished by Rubtsova (1971) and Emel'janova (1982).

The most recent Russian work on CSY grammar is by N. B. Vakhtin of St. Petersburg. He has published a monograph on the syntax of the simple sentence (1987), which as far as postbase grammar is concerned covers the same ground as Emel'janova's 1982 work. He has also written several articles relevant to postbase grammar (1988, 1989). The 1989 article is an interesting and insightful analysis of the order of what I call the AUX postbases. I must disagree with some of his analysis, since he sometimes wrongly delimits the boundaries of morphemes and postulates several zero morphemes, all of which I consider unnecessary.

In conclusion, despite its achievements in the areas of description and exemplification, Soviet scholarship is not particularly useful for the study of postbase grammar and classification.

2.1.2. Fortescue's Approach

The most comprehensive theory of Eskimo affixation is that of Fortescue (1980). He has worked out phrase-structure rules for the Greenlandic Eskimo word, which also account for his global scope rule: the postbases build upon one another, so that the rightmost one always has semantic scope over what stands to the left. In the diagram of phrase-structure rules (1), only those relevant for VV postbases are given (Fortescue 1980:261), but the principle is valid for the whole postbase grammar. In the categories used in these rules (2), the numbers of the groups are Fortescue's; numbers not shown refer to NV, NV, and NN postbases. The abbreviations used in the phrase-structure rules are in parentheses.

In the Greenlandic verb, the phrase-structure rules include two nodes, a verbal base (V_b) node and a sentential affix (V_s) node. The sentential affix node always stands to the left of the verbal base node, and has fixed ordering within itself. Because of the recursivity and optionality of several nodes (V_b , V_{mod} , and V_{sub}), the rules generate every possible ordering of elements with any number of repetitions of each, and thus amount to an elaborate Turing machine (Woodbury 1981:322). As a

- (1) $V \longrightarrow V_b (+ V_s) + \text{Infl.}$
 $V_b \longrightarrow V_b (+ V_e) (+ V_{\text{neg}}) (+ V_{\text{mod}})$
 $V_s \longrightarrow (V_{\text{ten}}) (+ V_{\text{ep}}) \left\{ \begin{array}{l} (+ V_{\text{neg}}) (+ V_{\text{sub}}) \\ (+ V_{\text{neg}}) (+ V_{\text{sub}}) \end{array} \right\}$
 $V_{\text{mod}} \longrightarrow V_{\text{mod}} (+ V_{\text{mod}})$
 $V_{\text{sub}} \longrightarrow V_{\text{sub}} (+ V_{\text{sub}})$

result, Fortescue's model of postbase ordering vastly overgenerates and makes predictions only where it is nonrecursive.

Fortescue's phrase-structure rules also make predictions about the syntactic dominance relationships between the postbases that a simple global-scope rule would be unable to make. He points out that the postbases under the sentential affix (V_s , indicating tense, epistemic modality, and subjective coloration) have different relationships to the rest of the word compared to those under the verbal base (V_b , indicating degree, phase of completion, and frequency and duration), in that the postbases under the V_s modify the V_b as a whole. The relationship differs in that the V_s sets the temporal parameters relative to which the verbal base proposition can be assigned a truth value. However, Fortescue also states that the global-scope rule cannot be completely replaced by the phrase-structure rule since the global rule is needed when several affixes occur in fixed slots under V_b or V_s (Fortescue 1980:262). At least for CSY, and I suspect for other Eskimo languages as well, the relationship between a verbal base node and a sentential affix node is actually more complex, and as a result the distinction between the two is less obvious. In subsection 2.2.2.2 I propose an alternative account of the relationship between the verbal base node and the sentential affix node.

Another new aspect of Fortescue's analysis is his distinction between lexicalized and semilexicalized combinations of postbase morphemes. Whereas lexicalized combinations are not the semantic sum of their parts, semilexicalized postbases are very common and semantically transparent combinations. Woodbury (1981:320) points out that, in effect, Fortescue has posited complex lexicalized or semilexicalized combinations for particular exceptions to his phrase-structure rules and has to some extent "buried the offending orders." Woodbury also notes that this by itself would not be a fair criticism of Fortescue's analysis, since he also posits semilexicalized postbases for combinations that do not bury an offending order. However, it is very unclear what is actually meant by "semilexicalization." Every student of Eskimo postbases is struck by the semantics of certain combinations occurring again and again, and, especially when one is not aware of the full paradigm

(2) Verbal extenders (V_e):

9. Judging and saying
10. Wishing and waiting
11. Causation and request
12. Striving and intending
13. Potentiality
14. Relation shifters

Verbal modifiers (V_{mod}):

15. Degree
 16. Manner
 17. Phase of completion
 18. Frequency and duration
-
19. Tense (V_{ten})
 20. Epistemic Modality (V_{ep})
 21. Negation (V_{neg})
 22. Subjective Coloration (V_{sub})
 23. Conjunctive (V_{conj})

of possibilities, it is very tempting to consider them a unit of some sort. I prefer not to conceive of lexicalization as a gradient phenomenon, since redefining lexicalization as such would necessitate a redefinition of what lexicalization means for the whole morphology and syntax of the language. For example, if there are indeed many degrees of lexicalization, one would have to decide what is productive, semilexicalized, or fully lexicalized in the following list of phrases using the verb *kick* with an object that is intuitively ordered from the "most" lexicalized to the "least" lexicalized combination or from the least semantically transparent and most predictable to the most semantically transparent and least predictable:

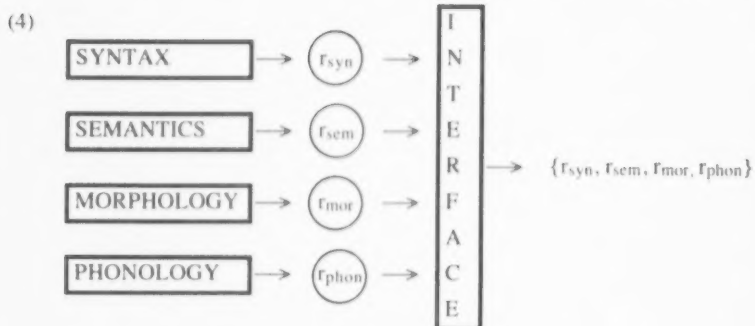
- (3)
1. kick the bucket
 2. kick drugs/kick the habit
 3. kick the chief of staff out of office
 4. kick the ball
 5. kick the car/kick the dog
 6. kick one's mother

Phrases 1 through 3 can certainly be considered various lexicalized constructions, and phrases 4 through 6, nonlexicalized; but if one adopted the concept of semilexicalization, it would be very problematic to define the bounds of an area in the middle of this list using semantic transparency or predictability. Therefore, I reject the concept of semilexicalization as being too vague.

2.1.3. Autolexical Syntax

A theory originally designed to account for some problems of Eskimo morphology and syntax called "autolexical syntax" (Sadock 1985, 1991) has recently emerged. The main tenet of this new hypothesis is that it is unnecessary, even incorrect, to posit the semantic, syntactic, morphological, and phonological levels of grammatical representation as being on the same plane, which has been done both in traditional grammar and in generative grammar. Instead, Sadock argues that these levels, or rather modules, are better represented on independent planes, each with their own tree structures and ultimately connected to the elements of the same surface sentence.

More generally, this theory argues that it is incorrect to assume that a modular grammar is necessarily hierarchically organized. Instead, the levels of representation should be viewed as autonomous components that are not hierarchically organized with respect to one another, and one should allow for a large amount of overlap of these components. The remarkable variety of hierarchical models of grammar in grammatical theory of the last twenty years, which vary widely as to which component can feed which component and as to which one is generative and which one is interpretive, can be considered evidence that a hierarchically organized account of grammar was defective to start with. This extremely modular view of grammar is represented here (4) by a diagram adapted from Sadock (1991:20). The four modules of this diagram, SYNTAX, SEMANTICS, MORPHOLOGY, and PHONOLOGY, are not ordered with respect to one another. In order to count as a grammatical sentence, an expression must satisfy the independent requirements of each module (i.e., must be parsable by each module). Thus, each module acts as a filter on all the others. The grammar generates a set of representations $\{r_{\text{syn}}, r_{\text{sem}}, r_{\text{mor}}, r_{\text{phon}}\}$, which corresponds to an expression of the language to which the grammar ascribes the syntactic parsings r_{syn} , r_{sem} , r_{mor} , and r_{phon} , respectively. Every element of the set must of course be an output of the appropriate component, and elements must also pass certain matching requirements imposed by the interface, which will be further discussed below.

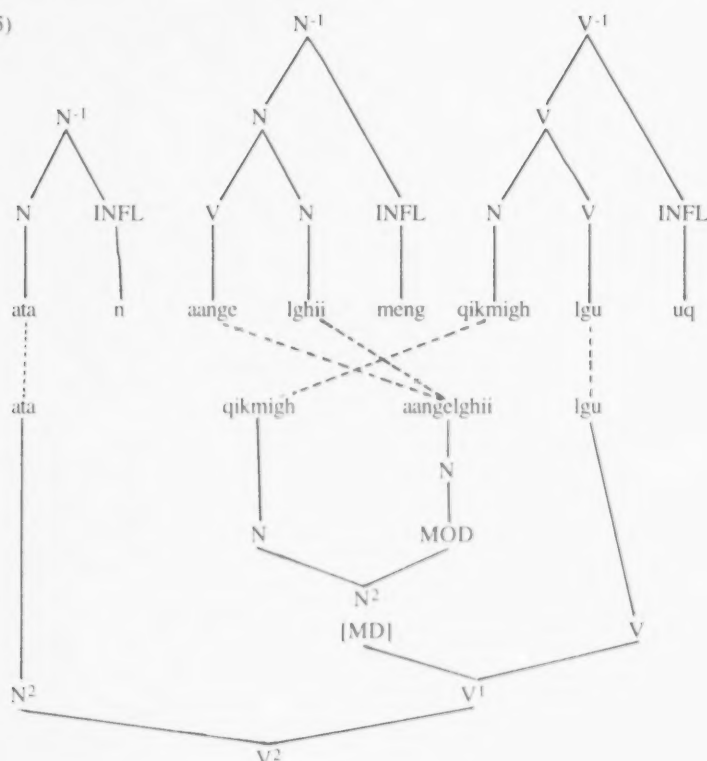


The structure of each of the four modules is relatively simple. Sadock (1991:21) assumes a context-free phrase-structure grammar for the first three modules. For the syntactic module, the phrase-structure rules of Generalized Phrase Structure Grammar (GPSG), whereby a rule that introduces a lexical head is encoded on that head as a lexical subcategorization feature. The semantic module contains rules intended to be a syntax for an interpretable logical language, rather than a strictly logical language; for example, only restricted quantification is used, since, as shown by McCawley (1981), only this type of quantification is appropriate for natural language semantics. The rules of the semantic component do not impose linear order on the elements they contain; only semantic scope can be indicated by them. For the morphological module, a phrase-structure grammar of stems and affixes is used and illustrated in Sadock (1985:397). The form of the phonological module has not yet been worked out.

There is also a lexicon in this theory, but it plays a nonmodular role. It contains a vocabulary of lexical items, with information on the structural properties of each item with respect to each of the modules. So, for every lexical item there will be information on its syntax, semantics, morphology, and phonology, but some items can be null with respect to their syntactic, morphological, or phonological properties.

The most convincing argument for autonomous representations is that a structural position in one dimension of grammatical representation does not always correspond to a structural position in another grammatical representation. Indeed, in most sentences and in most languages, tree hierarchies are such that the morphology can be conceived as a fine-grained continuation of the syntactic tree, but this is not necessarily the case, particularly in phenomena like cliticization and noun-incorporation, which have always been considered somewhat problematic and

(5)



marginal in hierarchical theories of grammar. On the contrary, the autolexical model predicts that there can be differences in tree branching in representations between any two of the four modules. For instance, it is predicted that there are lexical items whose scope in semantic structure is different from their position in syntactic structure, that there are morphemes that combine syntactically with phrases, but attach morphologically to words, and that there are parts of words having semantic scope over larger pieces of semantic representation. The need for an autolexical representation actually appears to arise for a variety of phenomena in many languages.

As an illustration, I use a CSY sentence (5) with distinct morphological and syntactic representations that is parallel to the Greenlandic case given by Sadock (1985:402). The morphological tree is on top, and the syntactic tree is at the bottom. By convention, the syntax is built upward in terms of bar level (with positive index numbers), and the morphology is built downward (with negative index numbers), so

that lexical items have the same zero bar level in both representations. Inflectional endings are present on the morphological plane only, and need not be present in the syntax. Sadock also provides convincing evidence that the Greenlandic equivalent of the CSY noun incorporating NV postbase *-lgu-* 'to have N' underlyingly takes an object in the Modalis (MD) case, since an equivalent morphologically independent (i.e., nonsuffixal) verb would take an object with this case. The model allows one to explain why a nominal modifier (indicated by MOD in the syntactic tree structure) has the MD case, since modifiers must agree with their heads, even though the evidence for this happens to show up in the syntactic tree only. This distribution of agreement features is obtained by assuming the principles of GPSG (Gazdar et al. 1985) dealing with this matter (Sadock 1985:400-405). After the application of the necessary phonological rules, the corresponding surface structure is

- (6) *Atan aangelghii meng qikmilguuq.*
 ata-n aange-lghii-meng qikmigh-lgu-uq
 father-AB(2s-s) be big-INP-MDs dog-have N-IND(3s)
 'Your father has a big dog.' (NBK/4-6)

Since a theory allowing any difference in tree structure between two distinct levels of representation would obviously be much too unconstrained, Sadock (1985) proceeds to identify and argue for a set of universal principles restricting the ways in which the two tree structures may differ. For example, for the structure in 5, the difference in linear order between the items at the end of the trees and the order occurring in the corresponding surface structure are accounted for by the following rules and principles. In the syntactic tree, *aangelghii* follows *qikmigh*, because CSY nominal modifiers normally follow their nominal heads. Two principles, from Sadock (1985:408-9), account for the morphological order and the surface result: (1) "Constraints on morpheme ordering are inviolable." In the case of our example, this means that *-lgu-* is morphologically a suffix, and it must follow the base to which it is attached. And (2) "Elements of morphological structure must be associated one-for-one with corresponding elements of syntactic structure to the maximum extent possible." This insures that the structure is the closest to one without crossing branches and that it does not violate any morphological or syntactic requirements of elements in it.

It is important to observe that this is neither a theory of syntax nor a theory of morphology; it is a theory of the possible mappings between the syntax and the morphology (Sadock 1985:387). Therefore, separate theories of phonology, morphology, syntax, and semantics will still be necessary, but it is argued that they

will be simpler and more elegant. For example, the morphology does not have to account for facts that are properly syntactic and, conversely, the syntax does not have to account for morphological facts.

In subsections 2.2.2.2.2 and 2.2.2.2.3, I show how an autolexical theory can be integrated in an overall description of CSY verb postbase ordering.

2.2. VV Postbase Grammar: The Present Approach

2.2.1. Productivity in Derivational Morphology and "Internal Syntax"

CSY postbase grammar can be conceived of as containing both syntactic and morphological elements in mixture. Indeed, the fully productive elements of an "internal syntax" (i.e., the bases and postbases relevant to internal syntax) are most often made of "real" morphology, which is reminiscent of the derivational morphology of more analytic languages and which the speaker must memorize.

Even though this "real" morphology does not participate in productive postbase ordering, I nevertheless give an account of it in order to show how it is to be distinguished from the fully productive morphology. Some homonymous and etymologically related postbases can be either "real" morphology or productive morphology, and in subsections 2.2.1.2 and 2.2.1.3, I concentrate on these, since they constitute the more unexpected cases of a difference between "internal syntax" and "real" morphology.

2.2.1.1. Preliminary Remarks on Productivity

In determining productivity, I have followed the position taken by Steven Jacobson in his CAY dictionary (1984) and in the CSY dictionary edited by him (Badten et al. 1987). In these works, postbases are considered productive if they can be freely added to any base (considering, of course, semantic limitations) without any unpredictable semantics arising from the combination. Examples of productive postbases were given in chapter 1, subsection 1.6.3.4. Nonproductive postbases cannot be used freely except with a particular set of bases that can be listed. The semantics of combinations of bases with nonproductive postbases can, but need not, be unpredictable. An example of a nonproductive postbase is *-tagh-* 'to fetch N, to gather N', which can be used with the bases *megh-* 'water' and *veg-* 'grass' and probably with other bases as well, but not with all bases referring to objects that could be fetched or gathered:

- (7) meghtaghtuq
 megh-tagh-tuq
 water-fetch.N-IND(3s)
 'he's fetching water'
- vegtaghtuq
 veg-tagh-tuq
 grass-fetch.N-IND(3s)
 'he's gathering grass' (BAb-300)

The term "marginally productive postbase" is used but not defined by Jacobson (1984); I understand it to refer to nonproductive postbases that can occur with a large, not yet exhaustively listed, number of bases and that might turn out to be productive for at least some speakers or for some dialects. The distinction between nonproductive and marginally productive is used in the classification in section 2.5. An example of a marginally productive postbase is *-yagh-* 'to go and V'; the semantically equivalent, fully productive postbase is *-yaghtugh-*:

- (8) inghuyaghtuq
 inghu-yagh-tuq
 pick.berries-go.and.V-IND(3s)
 'he went to pick berries' (BAb-306)

In the following discussion of the number of CSY productive verbal postbases, marginally productive postbases are counted as nonproductive postbases. In such a discussion, it is also important to consider the total number of CSY postbases. The figures are approximate and tentative, since they depend on one's theoretical presuppositions for deciding what counts as a single postbase; furthermore, the figures will change as more postbases are discovered. With these reservations, we can say that CSY has approximately 547 postbases: 75 NN, 55 NV, 30 VN, and 387 VV. It appears that the large majority of NN, NV, and VN postbases are productive, whereas for the VV postbases, there are approximately 190 nonproductive ones and 197 productive ones.

It is interesting to compare these numbers with those obtained for other Eskimo languages. In CAY, for example, there are approximately 556 postbases, of which 263 are VV postbases. Of these VV postbases, 237 are productive and 26 are nonproductive or marginally productive. These figures, based on a count in Jacobson (1984:429-602), should not be interpreted as CAY having fewer VV postbases than

CSY. Jacobson did not attempt to include every single rare nonproductive VV postbase in his dictionary, and as a result he lists fewer nonproductive VV postbases than I would have listed for the same language. However, our criteria for what constitutes a productive postbase are the same, and our figures for productive postbases are thus comparable.

There are about 237 productive VV postbases in CAY, a number significantly higher than 197, the number of productive VV postbases in CSY. One will have noticed that the number of productive VV postbases in CSY is about the same as its number of nonproductive VV postbases, and one can wonder whether the same proportion would hold between the corresponding groups of CAY postbases. As shown in the preceding paragraph, the total numbers of VV postbases given for CSY and for CAY are not comparable, since the CAY number would be somewhat higher if every element I would consider nonproductive were included. However, in order to obtain the same proportion of about one-half in CAY, one would have to add about 210 nonproductive postbases to the CAY list. I doubt very much that such a large number could be found. Thus, it is likely that CAY has comparatively fewer nonproductive postbases than CSY. Historically, one might expect that some of the postbases that are nonproductive only in CSY have fully productive cognates in other Eskimo languages, such as CAY. It has been suggested (Fortescue [1985:205-6]), on the basis of the quite incomplete Soviet postbase lists, that CSY has undergone an extensive loss of postbases. It would be more accurate to state that, in addition to a small amount of actual loss, CSY has lost the ability to use many of its postbases productively. A corollary would be that CSY uses fewer postbases on average than other Eskimo languages, since nonproductive postbases are by definition less common than productive postbases. My data appear to bear out this prediction (see chapter 1, section 1.6.3.4). The possible reasons why the number of productive VV postbases is relatively low in CSY is discussed in chapter 6.

2.2.1.2. Lexicalized Combinations of a Base and a Postbase

Considered here is the CSY "real" morphology that occurs immediately after the base and forms a lexicalized unit with it.

The verb stem *liite-* 'to learn' (Badten et al. 1987:106) can be followed by a postbase *-(i/u)ma-* that is formally identical to *-(i/u)ma-* 'Past Tense' to form *liisima-* 'to be knowledgeable, to be an expert' (de Reuse notebook 10:12; Rubtsova 1971:300). The evidence that this form is a lexicalized combination and actually does not contain Past Tense *-(i/u)ma-* is its idiosyncratic meaning and that it can be followed by a transitivizing postbase *-ke-*, which as a rule only occurs after emotional

verb bases and never after a Tense postbase: *liisimake-* 'to know (it or him/her)' (de Reuse notebook 9:53, 67; Badten et al. 1987:107). Etymologically, *-(i/u)ma-* has a stative meaning still apparent in CSY adjectival verbs and in other Eskimo languages (see Fortescue 1984:277-78 for Greenlandic). In CSY, this postbase indicates Past Tense with nonadjectival verbs, but in some lexicalized combinations, such as *liisima-* and *liisimake-*, the meaning 'to be in state of having learned' still prevails.

The verb stem *liite-* can also occur in lexicalized combinations with the otherwise productive postbase *-naqe-* 'to try to V'. Here, the situation is complicated by the fact that there is another productive postbase *-naqe-* 'PROSPECTIVE; to intend to V; to be going to V in the near future', evidently etymologically related to *-naqe-* 'to try to V', but different in meaning and occurring in different positions in the verb. Detailed evidence for the existence of two different postbases *-naqe-* is provided in subsection 2.2.2.2.1.

The lexicalized combination *liinnaqe-* specifically means 'to study' (HEN-16; Angi et al. 1975:62; Irrigoo et al. 1978:17; Menovshchikov and Vakhtin 1983:179) rather than 'to intend to learn; to be going to learn' or 'to try to learn'. It is possible to decide what postbase *-naqe-* this lexicalized combination etymologically contains. The sequence *liinnaqnage-* means 'to intend to study; to be going to study' (de Reuse notebooks 7:21, 10:37; Angi et al. 1975:dedication), thus containing both the lexicalized *-naqe-* and the productive *-naqe-* 'to intend to V'. Furthermore, *liinnaqe-* has been translated twice in my corpus as 'to intend to learn' (notebook 2:18, 19), and was thus conceived of as a nonlexicalized combination. This is not evidence that the combination is actually productive, but rather that it is the sequence *liite-naqe-* 'to try to learn' rather than *liite-naqe-* 'to intend to learn' that became lexicalized, which is expected considering that the order of the productive sequence *-naqe-naqe-* is 'to intend to try to V' and not 'to try to intend to V'.

Further evidence for a lexicalized sequence *liite-naqe-* 'to try to learn' is the existence of the lexicalized sequence *liinnaqutke-* 'to study' (Silook et al. 1983:24), where *-náqutke-* is a synonym of *-naqe-* 'to try to V', but not of *-naqe-* 'to intend to V'.

It is thus often true that lexicalized sequences have the same positional characteristics as the corresponding productive postbases (if such corresponding productive postbases exist), but it is not necessarily the case, as will be seen several times in this section.

Thus, one can distinguish no less than three postbases *-naqe-*, two productive ones, and one element of "real" morphology, etymologically connected to 'to try to V'. This situation is not unusual, since one can make a similar case in Greenlandic

concerning several postbases *-niar-*, semantically corresponding to CSY *-naqe-*; examples are provided in Fortescue (1980:269).

A third example of a "real" morphological postbase is *-yug-* 'to feel V', which is common in lexicalized combinations with roots and verbs of emotion, and can be followed, like the element of "real" morphology *-(i/u)ma-*, by transitivizing *-ke-*. So, from the root *efqugh-* 'pleased, satisfied', one can derive the verb *efqughyug-* 'to be pleased, satisfied', and then the transitive verb *efqughyuke-* 'to be satisfied with' (Badten et al. 1987:53). This postbase is not to be confused with the etymologically related, fully productive postbase *-yug-* 'to want to V'. Again, both postbases (in boldface) can actually occur in the same form, as in

- (9) *igamsiqayugviksugapung*
igamsiqa-yug-vike-yug-apung
 thankful-**feel.V**-have.an.object.of.one's.V-**want.to.V**-IND(1d-3p)
 'we wish to thank them' (NBK/6-58)

Evidence that these two postbases have to be kept distinct is provided not only by their position with respect to one another but also by their position with respect to another postbase. Thus, it appears that when *-yug-* is followed by the productive causative postbase *-(te)ste-* 'to cause to V', it forms a lexicalized unit with the preceding base, a verb of emotion or feeling, as in 10 through 12:

- (10) *kaynguyugtestekaqii*
kayngu-yug-(te)ste-kaqe-ii
 embarrassed-feel.V-CAUS-PST-IND(3s-3p)
 'he caused them to feel embarrassed' (NBK/9-55, 56)
- (11) *qiiksugtestaa*
qiike-yug-(te)ste-aa
 uneasy.due.to.being.watched-feel.V-CAUS-IND(3s-3s)
 'he made him feel uneasy by watching him' (BAb-186)
- (12) *qinuyugtestaqaa*
qinu-yug-(te)ste-aqe-aa
 sick-feel.V-CAUS-PROG-IND(3s-3s)
 'it is making him sick' (HEN-11)

However, when the order is *-(te)ste-yug-*, it becomes a fully productive sequence 'to want to cause to V' (i.e., 'to want someone to V'), as in 13:

- (13) Yugem aghnamun neghesugaa kayu.
 yug-m aghnagh-mun negh-(te)ste-yug-aa kayu-Ø
 man-RLs woman-TMs eat-CAUS-want.to V-IND(3s-3s) fish-ABs
 'The man wants the woman to eat the fish.' (JAc-50)

2.2.1.3. Lexicalized Combinations of Postbases

Crucial for the study of postbase syntax, the "real" morphology is also used in forming lexicalized combinations of postbases which are themselves fully productive. These lexicalized combinations are formally easy to analyze, but are semantically idiosyncratic, and often contain postbases in orders not occurring productively. However, as will be seen below, there is some regularity in the formation of certain types of lexicalized postbases.

The existence of morphologically complex branching affixes in Eskimo constitutes a serious problem for applying the theory of lexical phonology (Kiparsky 1983:19). In order to account for branching affixes, one would need to introduce a rule allowing for the formation of complex affixes. Since, in lexical phonology, the output of every level of word formation should produce a fully interpretable lexical item, a suffix cannot be the product of a level of word formation. This is especially problematic for Eskimo, in which suffixes are absolutely beyond being interpreted by the native speaker. Also, those complex suffixes are built of a suffix subcategorizing for another suffix, which is an option unavailable to lexical phonology, where all affixes subcategorize only for lexical categories like Noun or Verb.

Furthermore, it would be necessary, in Kiparsky's lexical phonology, to postulate some intermediate level between the lexicon and the lexical phonology where these complex postbases can be formed. However, the phonology of these postbases is almost always perfectly regular in CSY, and so there would be little phonological justification for such an intermediate level. One example where a lexicalized combination has unexpected phonology, considering the sum of its parts, is the VV postbase *-yuit^oe-* 'to V poorly' (Badten et al. 1987:308) (cognate to CAY *-yuit^oe-* 'to never V, to habitually not V' [Jacobson 1984:598]), which is a combination of *-yu-* 'to be good at V-ing' and *-(ng)it^oe-* 'to lack the quality of V'. The productive lexical phonology of these elements would lead one to predict **-yungit^oe-* instead of *-yuit^oe-*. I have not been able to find another morphologically

complex postbase with unpredictable phonology in CSY, so *-yit^oe-* must be considered an exceptional case.

In the autolexical model I adopt in subsection 2.2.2.2, there are no constraints against subcategorizing affixes for other affixes in the lexicon, and this is one of the reasons for preferring it over the lexical phonology model.

The following examples are lexicalized combinations of postbases. They contain the otherwise productive VV postbases *-(ng)linagh-* 'to only V', *-kayugu-* 'to be able to', *-(i/u)ma-* 'Past Tense', *-naqe-* 'to try to V', and *-yug-* 'to want to V'.

The productive VV postbase *-kayugunaqe-* 'to learn to V' is a lexicalized combination of the productive postbase *-kayugu-* 'to be able to' and the productive postbase *-naqe-* 'to try to V'. It is of particular interest as an illustration of the parallelism between the internal and external syntax of CSY, since this combination is semantically and structurally parallel to the base *liinnaqe-* 'to study' discussed in the preceding subsection. The only difference is that the resulting lexical item is a bound and not a free morpheme (example 14).

- (14) qimugsiqayugunaqnaquq
 qimugsigh-kayugunaqe-naqe-aqe-uq
 drive.a.dogteam-learn.to.V-PROSP-PROG-IND(3s)
 'he intends to learn to drive a dogteam' (RUa-614)

The postbase *-(i/u)manginagh-* is not a productive sequence of *-(i/u)ma-* 'Past Tense' and *-(ng)linagh-* 'to only V', since it means 'to V continuously, all the time' and not necessarily the predictable 'to only V in the past'. In example 15 the inherent tense is Past, but in example 16 the tense is Future, and, as will be seen in subsection 2.3.4.2, Future Tense is incompatible with Past Tense *-(i/u)ma-*.

- (15) kumlaaghqumanginaghaa
 kumlaaghqe-(i/u)manginagh-aa
 freeze-V.continuously-IND(3s-3s)
 'it kept freezing' (HEN-13)
- (16) iknaughsaamanginaghnaaghii
 iknaugh-sagh-(i/u)manginagh-naagh-ii
 become.stronger-CAUS-V.continuously-FUT-IND(3s-3p)
 'he will keep them stronger continuously' (NBK/9-49)

The reverse sequence, *-(ng)inagh-(i/u)ma-*, is semantically transparent and not lexicalized, as seen in 17:

- (17) *igleghtengnginaamaluteng*
igleghte-(ng)inagh-(i/u)ma-luteng
 travel-only.V-PST-APO(3p)
 'they were only travelling' (NBK/6-46)

The lexicalized combination *-yuguma-* 'to be easy to V', from *-yug-* and *-(i/u)ma-*, occurs in 18, and can be used with a productive Past Tense *-(i/u)ma-*, as in 19:

- (18) *pelimyugumaaqut*
pelime-yuguma-aqe-ut
pelime-be.easy.to.V-PROG-IND(3p)
 'they are easily shattered' (BAB-154)
- (19) *sugagyugumamaaq*
sugag-yuguma-(i/u)ma-uq
be.offended-be.easy.to.V-PST-IND(3s)
 'he was easily offended' (SLC-21)

-yuguma- also contrasts semantically with the sequences of *-yug-* 'to feel V' (20) or *-yug-* 'to want to V' (21) and Past Tense *-(i/u)ma-*:

- (20) *alingyugumalghii*
alinge-yug-(i/u)ma-lghii
be.afraid-feel.V-PST-INP(3s)
 'he was apprehensive' (BAB-27)
- (21) *neghyugumaaq*
negh-yug-(i/u)ma-uq
eat-want.to.V-PST-IND(3s)
 'he wanted to eat' (RUa-607)

Several common VV postbases are lexicalized combinations of a VN and an NV. Examples are *-kau-* and *-kaqe-* 'Past Tense' containing VN *-kagh-* 'one that has V-ed; one that has been V-ed' and NV *-(ng)lu-* 'to be V' or NV *-ke-* 'to have as one's

N'; *-yaghqau-* and *-yaghqaqe-* 'to be supposed to V', from the VN *-yaghqagh-* 'something that will V or be V-ed' and the NV *-(ng)u-* 'to be V' or NV *-ke-* 'to have as one's N'; and *-kayugu-* 'to be able to V', from the VN *-kayug-* 'one that V's readily' and the NV *-(ng)u-* 'to be V'. These combinations are semantically transparent, but must nevertheless be treated as lexicalized because the transitivity requirements of their elements can be violated. Indeed, even though the NV *-(ng)u-* can only be used with intransitive verbs, *-kau-*, *-kayugu-*, and *-yaghqau-* occasionally occur with transitive verbs. These postbases are discussed further in subsection 2.4.1.

An example of a CSY word containing several lexicalized combinations of postbases is 22, which was cited by Willis Walunga (personal communication 1985) as the "longest" word existing in Eskimo. The concept of what would be the "longest" word in CSY is of course trivial; what is interesting is the choice of elements with which this word was constructed. This word contains a rather long base (including the "real" morphology postbase *-yug-* discussed in the preceding subsection), only four productive postbases (three of which are complex and rather long), and an inflectional ending which is also longer than average. This choice of longer-than-average lexicalized elements is evidence that it is easier for the native speaker of CSY to make a long word of a few long elements rather than of a large number of short elements.

- (22) *igamsiqayugvikumanginaghyaghqagsaghaghpesikut (...)*
igamsiqayug-vike-(i/u)manginagh-yaghqaqe-yagh-aghpesikut
 feel.thankful-have.an.object.of.one's.V-V continuously-be supposed.to.V-
 V.in.vain-IND(2s-1p)
 'you are supposed to thank us continuously, but...' (NBK/7-78)

2.2.2. Postbase Ordering

2.2.2.1. The Order of Elements in Lexicalized Combinations of Postbases

It has been known since the original observations of Kleinschmidt (1851), who is followed by all other students of Eskimo "internal syntax," that it is possible to relate affix ordering to considerations of semantic scope, so that if an affix *x* has scope over an affix *y*, *x* will be external (i.e., will follow in a suffixing language like Eskimo) with respect to *y*. This point is elaborated further in subsection 2.2.2.2, and in section 2.4.

However, lexicalized sequences of Eskimo postbases often turn out to contain elements with anomalous scopes, in that the first affix often seems to have semantic scope over the second. Actually, in formally transparent lexicalized combinations of postbases, it is these scope anomalies that are the main evidence of a lexicalized combination in the first place. Examples are *-(te)snanigh-* and *-(te)snaanghit^oe-* discussed under examples 25 through 29 below.

All lexicalized combinations do not have anomalous scope, since a lexicalized combination can also be recognizable as lexicalized because of its unpredictable semantics or transitivity requirements, regardless of its scopal properties. An example is *-(i/u)manginagh-* 'to V continuously, all the time' (see examples 15 and 16, above), which etymologically contains *-(i/u)ma-* with the original meaning 'to be in a state of V-ing' and *-(ng)inagh-* 'to only V', and thus must have originally meant 'to only be in a state of V-ing', according to the normal scopal rule that the second affix has scope over the first. It is easy to see how the present meaning could have arisen from this original meaning.

It is not obvious why scope should often, but not always, be anomalous in lexicalized combinations. It seems unlikely that native speakers would tend to reverse the expected order of affixes in order to indicate that there is something semantically unpredictable about a particular combination.

Before attempting an explanation, I can make the discussion more concrete by examining a series of postbases common in lexicalized combinations. The first of these is *-pag-* 'to V in a big way', which, at least in SLI, does not occur by itself as a productive postbase and is thus necessarily part of lexicalized combinations, such as *-pagnanigh-* (classified under A. 8.2 in section 2.5.3); *-pagaatagh-*, from *-aatagh-* (A. 8.5.1); *-pagllag-*, from *-ghllag-* (classified under B. 1.1); and *-pagigat^oe-*, *-pagit^oe-*, *-pagnaanghit^oe-*, *-pagpe-*, *-pagunghit^oe-*, *-panghit^oe-*, *-pafqagh-*, all negative postbases (classified under C) with corresponding forms lacking the initial *-pag-*. The general scope rule is applicable to these, since these combinations are built of affixes such that the rightmost one has scope over the left ones. However, *-pag-* also occurs with the causative postbase *-(te)ste-* 'to cause one to V; to allow one to V; to make one V; to let one V; to have one V' and only in the sequence *-(te)stepag-*, even though the meaning 'to cause to V a lot, too much' is what one would predict for the

reverse order of elements. One would expect *-(te)stepag-* to mean 'to cause too much to V'.¹ Examples are

- (23) *aqumtaaghtestepaglunga*
aqumtaagh-(te)stepag-lunga
 keep.sitting-cause.to.V a.lot-APO(3s-1s)
 '(he took up the time) causing me to sit there for too long' (BAB-162)
- (24) *kayaalistepaglukek*
kayaali-(te)stepag-lukek
 get.weak-cause.to.V a.lot-APO(1p-3d)
 'we allowed (the stove, inherently dual) to get too weak' (SI-54)

The postbase *-(te)ste-* is also common in lexicalized combinations with certain semantically negative postbases. One is *-(te)snanigh-* 'to tell not to V; to forbid one to V', a combination of *-(te)ste-* and *-nanigh-* 'to cease V-ing; to stop V-ing; to quit V-ing' (examples 25 through 27); another is the less frequent, but semantically closely parallel *-(te)snaanghit^oe-* 'to tell not to V in the future; to forbid one to V in the future', a combination of *-(te)ste-* and *-naanghit^oe-* 'to not V in the future' (examples 28 and 29):

- (25) *Apamta legasiighwaghtesnanighaqiinkut samengllu kinkunengllu.*
apa-mta legasiighwagh-(te)snanigh-aqe-iinkut sa-meng=llu ki-nku-neng=llu
 grandfather-RL(1p-s) make.fun-tell.not.to.V-PROG-IND(3s-1p) something-
 MDs-also someone-PL-MDp-also
 'Our grandfather instructs us not to make fun of anything or anyone.' (SI-83)
- (26) *Maaten elpek nenglaquesnanightuten.*
maaten ell-pek nenglagh-ke-(te)snanigh-tuten
 now PN-AB(2s) laugh-feel.V.toward-tell.not.to.V-PROG-IND(2s)
 'Now you did not want to be laughed at (so why do you laugh at others?)'
 (NBK/5-38)

¹ One can argue, of course, that there is, from a pragmatic point of view, no difference between 'to cause to V too much', and 'to cause too much to V'. While the scopal differences might not matter here, one still has to explain why only the order *-(te)ste-* occurs.

- (27) Ungilagyat apama tugusnanighaqii.
 ungilagyagh-t apa-ma tugu-(te)snanigh-aqe-ii
 sea.sponge-AB(p) grandfather-RL(1s-s) take-tell.not.to.V-PROG-IND(3s-3p)
 'My grandfather tells me not to touch sea sponges.' (SI-170)
- (28) avelghaghtesnaanghisaghqaqsaghanka (...)
 avelghaghte-(te)snaanghit^oe-yaghqage-yagh-anka
 not.go.to.an.event-forbid.to.V.in.the.future-be.supposed.to.V-V.in.vain-IND(1s-3p)
 'I am supposed to prevent them from missing it (school) in the future, but...'
 (IRR-8)
- (29) Umiilemta nagaququnigu unguvasnaanghilkanga.
 umiileg-mta nagaqugh-kunigu unguva-(te)snaanghit^oe-kanga
 leader-RL(1p-s) hear-CDO(3Rs-3s) be.alive-forbid.to.V.in.the.future-TRP(3s-3s)
 'Our leader, when he hears it (a sea-mammal) does not allow it to escape with its life.' (EMa-67)

There is clear evidence that these combinations must be lexicalized, since the scope is anomalous and since their meaning is unpredictable; if the scope rule applied and if the meaning was totally predictable, they would mean respectively *'to cease to cause to V' and *'will not cause to V'.

In contrast to these, the sequence *-nanigh-(te)ste-* 'to cause to cease' also exists. It is productive, semantically transparent, and the general scope rule applies to it; example 30 is actually a sentence from a Bible translation (I Corinthians 1.19); there are also examples in native texts, but I have not yet obtained a precise translation for these. I have not found any occurrences of *-naanghit^oe-(te)ste-*, but I would predict that, like *-nanigh-(te)ste-*, it is possible as a productive sequence, and would mean 'to cause to not V in the future'.

- (30) Peghqineghet peghqinellghat atuunanighstesleqaqa.
 peghqinegh-t peghqinegh-llegh-at atugh-(ngju-nanigh-(te)ste-lleqe-aqa
 wise.person-RLp be.wise-act.of.V-ing-AB(3p-s) useful.thing-be N-
 cease.to.V-cause.to.V-FUT-IND(1s-3s)
 'I will destroy (lit., cause to cease to be a useful thing) the wisdom of the
 wise.' (NBK/9-52)

It thus appears that when any of the elements, *-pag-*, *-(te)ste-*, and a semantically negative postbase (such as *-naanghit^oe-* or *-nanigh-*), co-occur in a pair to form one lexicalized postbase, the semantic scope rule is not applied. It should be noticed that they appear to occur in some sort of fixed order with respect to each other:

- (31) 1. *-(te)ste-*
 2. *-pag-*
 3. *-naanghit^oe-* or *-nanigh-*

In this manner, the lexicalized combinations *-(te)stepag-*, *-pagnaanghit^oe-*, *-pagnanigh-*, *-(te)snaanghite-*, and *-(te)snanigh-* are predicted. Note that I consider *-pagnaanghit^oe-* and *-pagnanigh-* to be combinations to which the general scopal rule can be applied. From the order given in 31, one can deduce that it is actually not necessary to apply the scopal rule to them; instead, that the scopal rule appears to be respected is coincidental since it reflects that the ordering of *-pag-* must be fixed in front of *-naanghit^oe-* or *-nanigh-*. Even though the above data might not be sufficient evidence, I assume that all elements of lexicalized combinations will have such a type of fixed order with respect to one another. Then one can argue that the scopal rule actually plays no part in the ordering of the components of lexicalized postbases, but rather that they can be predicted by a statement of fixed ordering like 31.

The findings of this section can be summarized in two principles. The first is the Scopal Irrelevance Principle (SIP).

- (32) The general scopal rule is irrelevant to lexicalized combinations of affixes.

I assume that it is not necessary to make a lexicalized combination opaque to the scope rule by ordering the scope rule after the lexicalization, because of the simultaneous parsing of the string by the morphological and semantic modules of

autolexical syntax. This assumption is argued for and exemplified in subsection 2.2.2.2, and section 2.4.

The SIP is complemented by what I will call the Fixed Order Principle (FOP).

- (33) A lexicalized pair of affixes will be a subset of a principled set of affixes that occur in a fixed order relative to one another.

More research is necessary to precisely define this set of affixes. Generalizing from the list in 31, it might be that the ordered set is 34, where the abbreviations AUX, PreAUX, Class-Free, and NEG stand for VV postbase classes morphologically and semantically defined in section 2.3.

- (34) AUX
PreAUX
Class-Free
NEG

Examples already discussed are for AUX plus PreAUX: *-kayugunaqe-*; for AUX plus Class-Free: *-(i/u)manginagh-*; for AUX plus Negative: *-naanghit⁰e-*; for PreAUX plus Class-Free: *-(te)stepag-*; for PreAUX plus NEG: *-(te)snaanghit⁰e-*; for Class-Free plus NEG: *-panghit⁰e-*. Set 34 is certainly incomplete, since sequences of PreAUX plus PreAUX [e.g., *-naqtke-* 'to try to V', from the PreAUX postbases *-naqe-* and *-(u)tke-*], sequences of PreAUX plus AUX [e.g., *-yuguma-* 'to be easy to V', from PreAUX *-yug-* and AUX *-(i/u)ma-*], and sequences of Class-Free plus PreAUX (e.g., *-pagaatagh-* 'to V for a long time', from Class-Free *-pag-* and PreAUX *-aatagh-*) also occur, although they appear to be relatively uncommon. However, 34 is useful in that it correctly predicts that at least some sequences, such as AUX plus AUX, are immune to lexicalization.

The FOP thus predicts, rather trivially, that lexicalized affix combinations always occur in a fixed order. The interesting prediction is that if the lexicalized combinations *-(i/u)ma-(ng)inagh-* or *-yug-(i/u)ma-* exist, the principle will exclude the possibility of other lexicalized combinations **-(ng)inagh-(i/u)ma-* or **-(i/u)ma-yug-*, and such combinations indeed never occur lexicalized. The sequence *-(ng)inagh-(i/u)ma-* does exist, but it has to be a productive one (see example 17).

It should be noted that the SIP does not imply that the combination is always lexicalized when the scopal rule does not apply. Also, the FOP does not imply that

only lexicalized combinations occur in a fixed order. The following sections demonstrate that none of these assumptions would be correct.

2.2.2.2. Postbase Ordering in Productive Combinations

In the preceding subsection, I attempted to describe the ordering of lexicalized combinations of Eskimo postbases in terms of what amounts to a position-class device. The question is now whether a position-class device would be useful in describing postbase ordering in productive combinations. At first glance, such a device appears to be useless for a language with an extremely complex and productive internal syntax like Eskimo. This complexity and productivity is illustrated with abundant data in a programmatic discussion of VV postbase ordering by Smith (1978:37-48), who rejects the existence of position classes, arguing that relative semantic scope will turn out to be the only factor constraining possible postbase orders. Indeed, a position-class approach is equivalent to interpreting the morphology as one large rewriting rule that orders all the postbases of a word in a flat umbrella-shaped tree. This type of tree cannot lead to precise predictions about facts of semantic scope. For morphology-internal reasons, a description of the order of productive postbases in terms of position classes is also problematic since it has been shown that morphology, like syntax, has to be conceived of as a recursive grammar, and a position-class device cannot accommodate recursivity.

Not surprisingly, a treatment of Eskimo postbase morphology primarily in terms of position classes has only been attempted by one author, in two short and incomplete descriptions of North Slope Inupiaq verb morphology written in the tagmemic framework (Webster 1961, 1968:28-30, 43).

A position-class analysis, however, permits precise and easily verifiable predictions, and, therefore, the salvageable part of Fortescue's treatment (1980) is his position-class analysis (see subsections 2.2.2.2.2 and 2.3.4). In my own approach, I follow Fortescue in assuming that Eskimo verb morphology can be represented with phrase-structure rules and that part of these phrase-structure rules generate what amounts to a position-class device. I differ from him in further restricting the power of recursive phrase-structure rules and in expanding the role of position classes.

Furthermore, I follow the model of autolexical syntax in assuming that the facts of semantic scope need not be represented in the morphological phrase-structure representation. Rather, I assume that the morphological module is separate from the semantic module and that the facts of semantic scope therefore need not be accounted for in the morphological module.

2.2.2.2.1. Problems in Treating Eskimo Postbase Ordering

In addition to the task of distinguishing lexicalized combinations from productive combinations, treated above, there are other tasks that make a description of Eskimo postbase ordering a challenging enterprise. Such a description is made difficult by the complexity of the Eskimo internal syntax, in which the same affix can occur twice in a word and where a number of postbases can occur in various orders with respect to each other. As Woodbury (1981:344) points out, near-generalizations on ordering are continually found, and, since ordering might be largely based on semantic scope relations, these might simply indicate that certain meanings, and hence certain orders, are far more common than others.

For example, words containing the same postbase twice are so rare that one might think of formulating a grammatical principle predicting their absence. However, they do occur, and thus will have to be predicted by a recursive rule. Example 35 is a sentence from an *ungipaghaan* (traditional tale) with a word containing *-sqe-* 'to ask to V' twice:

- (35) Nanevgam aghnaghaat kayagtii iitghesqesaghtiisqelluku Qawaak Qatelghii.
 Nanevgagh-m aghnaghagh-t kayagte-ii itegh-sqe-yaghtugh-sqe-luku
 qawaag-Ø qategh-lghii-Ø
 old.man-RL girl-ABp send-IND(3s-3p) come.in-ask.to.V-go.V-ask.to.V-
 APO(3s-3s) bird-ABs be.white-INP-ABs
 'The elderly eagle sent the girls out to have them tell the White Eagle to come
 in', or, more literally, 'The old man sent the girls, asking them, to go and
 ask him, the White Eagle, to come in.' (SLC-105)

Some CSY postbases can be doubled for emphasis, and thus are always adjacent when occurring twice in a word; in such cases, a less powerful phrase-structure rule will be needed. *-ma-* 'to V with interruptions or intervals' (36) is attested for the SFE only (Menovshchikov 1967:44, 45), and can be doubled, expressing greater magnitude.² The doubling *-ma-ma-* means 'to V with big interruptions, to V seldom', as seen in 37:

² *-ma-* should not be confused with Past Tense *-(i/u)ma-* since it can occur before Future Tense *-lleqe-* (Menovshchikov 1967:45).

- (36) ukinimaaquq
 ukini-ma-aqe-uq
 sew-V with interruptions-PROG-IND(3s)
 'she is sewing with interruptions' (MEc-44; MV-182)
- (37) aqelqaamamaaquq
 aqelqagh-(ng)u-ma-ma-aqe-uq
 guest-be N-V with interruptions-V with interruptions-PROG-IND(3s)
 'he visits with large interruptions' (MEc-45)

The postbase *-(ngw/w)aagh-* 'to completely, thoroughly V' can also occur doubled, expressing greater intensity, both in the SFE and on SLI:

- (38) qamagtengngwaaghwaaghluni
 qamagte-(ngw/w)aagh-(ngw/w)aagh-luni
 consume-thoroughly V-thoroughly V-APO(3s)
 'it being finished completely' (AN-20, 27)
- (39) nekegtengngwaaghwaaghluku
 nekegte-(ngw/w)aagh-(ngw/w)aagh-luku
 put.in.its appropriate place-thoroughly V-thoroughly V-APO(3s-3s)
 'putting it thoroughly in its appropriate place' (T/52-21)

It is clear that such doublings are not to be considered lexicalized combinations, since the examples above seem to alternate freely in the texts in which they occur with the more common, but less expressive, forms *nekegtengngwaaghluku* and *qamagtengngwaaghluni*.

One could also make the generalization that when a postbase can occur twice in a word, and also consistently occurs in two positions with respect to other postbases, one actually is dealing with two homonymous postbases. The existence of two different productive postbases *-naqe-* (already discussed in subsection 2.2.1.2) is clearly demonstrated in this way. In examples 40 and 41 the two postbases occur in the same word; and in the pairs of examples 42 and 43, 44 and 45, and 46 and 47, *-naqe-* 'to try to V' consistently occurs before a certain postbase, and *-naqe-* 'to be V-ing in the near future' consistently occurs after that postbase. Since the two different meanings of *-naqe-* are related, they are not always helpful in making the distinction.

- (40) pagsinganaqnaqunga
pagsinga-naqe-naqe-unga
be present-try.to.V-PROSP-IND(1s)
'I'll try to attend' (BAB-144)
- (41) elgughaghnaqnaqegkangi
elgughaghte-naqe-naqe-kangi
hit.on.the.mark-try.to.V-PROSP-TRP(3s-3p)
'he is going to try and get to them (landing beach spots)' (NBK/3-40)
- (42) apeghiighnaqumanginastaghiinaq
apeghiigh-naqe-(i/u)manginagh-staghiinagh-Ø
finish-try.to.V-continually.V-act.of.only.V-ing-ABs
'continually trying to finish everything (i.e., wasting nothing)' (SLc-75)
- (43) nutaghsimanginaghnaqutek
nutaghte-(i/u)manginagh-naqe-utek
be renewed-continually.V-PROSP-IND(2d)
'you (two) will be continually renewed' (SLc-40)
- (44) nulightughnaqsaghtuumalghiik
nulighh-tugh-naqe-yaghtugh-(i/u)ma-lghiik
wife-get.N-try.to.V-go.and.V-PST-INP(3d)
'they went to try to get married' (PU-14)
- (45) qerngughsaghtughnaqaqa
qerngughte-yaghtugh-naqe-aqa
gather-go.and.V-PROSP-IND(1s-3s)
'I am about to go collect it' (PU-15)
- (46) pinaqeghllakuvek
pi-naqe-ghllag-kuvek
do-try.to.V-V.a.lot-CDO(2s)
'if you persevere' (HEN-16)

- (47) negheghllagnaunga
 negh-ghlag-naqe-unga
 eat-V.a.lot-PROSP-IND(1s)
 'I am about to eat a lot' (MEa-107)

A fortiori, the same generalization can be used for distinguishing the marginally productive postbase *-yagh-* 'to go and V' from the homonymous fully productive postbase *-yagh-* 'to V in vain' (example 48):

- (48) Akugaaq nulughyaqaayaghtunga kayuneghitunga.
 akugaaq nulugh-yagh-kau-yagh-tunga kayu-te-nghit^oe-unga
 the.other.day ice.fish-go.and.V-PST-V.in.vain-IND(1s) fish-catch.N-NEG-
 IND(1s)
 'I went fishing the other day, but I did not catch anything.' (HEN-9)

This generalization also breaks down in several cases, some of which are treated in subsection 2.3.4.3.

Finally, there even seem to be some cases where generalizations on semantic scope relationships break down. For example, the very general scopal rule (see subsection 2.1.2), that the rightmost postbase always has semantic scope over what stands to the left, does not seem to apply to the sequences involving *-nanigh-* 'to cease to V' and *-(u)tke-* 'to V on account of' in 49 and 50. Dialectal or idiolectal variation is not involved here, since these forms were found within three lines from each other in the same story.

- (49) aananiitkumakanga
 aane-nanigh-(u)tke-(i/u)ma-kanga
 go.out-cease.to.V-V.on.account.of-PST-TRP(3s-3s)
 'he ceased going out on account of it (watching his child)' (SL-1)
- (50) aanutkennanighaa
 aane-(u)tke-nanigh-aa
 go.out-V.on.account.of-cease.to.V-IND(3s-3s)
 'he ceased going out on account of it (watching his child)' (SL-1)

My analysis does not try to account for cases like 49 and 50, since they are unsystematic and quite uncommon. There are other cases, however, in which the

semantic scope rule breaks down in a more systematic way, and these will be accounted for in subsection 2.4.1.

2.2.2.2.2. The Morphological Module

I maintain that one can empirically distinguish in CSY between four main types of VV postbases: (1) PreAUX postbases, which can occur in various orders with respect to each other, but they always precede AUX postbases; (2) AUX postbases, which occur in five position classes in a fixed, constant, exceptionless order with respect to each other and in front of the inflectional ending; (3) Class-Free postbases, which can follow or precede PreAUX postbases and follow NEG postbases; and (4) Negative postbases (NEG), which follow PreAUX postbases and can occur after some AUX postbases.

It appears that the difference between the four classes of postbases is morphological and cannot be made solely on syntactic or on semantic criteria. Precise morphological criteria for distinguishing these four types are given for PreAUX in 2.3.1; for AUX in 2.3.4; for Class-Free in 2.3.2; and for NEG in 2.3.3. Most AUX postbases belong to the loose semantic groups of Epistemic Modality, including Evidentiality, and Tense. The PreAUX postbases can indicate Voice, Aspect, Manner, and Deontic Modality, including Volitionality. The NEG postbases always indicate Negation or Prohibition.

However, other semantic groupings crosscut the distinctions between the four classes. Thus, PreAUX postbases include a group I have called Addressee expectations of speaker or hearer, obviously semantically very close to the Class-Free postbases, which often indicate a Judgment of speaker on the verb or the subject of the verb. Distinctions of Epistemic Modality crosscut the division between Class-Free and AUX postbases, since a group of Class-Free postbases refers to Degree of certainty of the speaker and since some AUX postbases are Evidential. Aspectual distinctions similarly crosscut the division between AUX and PreAUX postbases, since Progressive (PROG) is aspectual and is an AUX postbase, whereas all other aspectual distinctions are expressed by PreAUX postbases. From a syntactic point of view, the syntactic class of compound-verbal postbases (see chapter 1, subsection 1.6.3.5) also crosscuts the division between AUX and PreAUX postbases. For examples of the four types, see the classification in section 2.5.

The phrase-structure rules involving these four types are given in 51. A detailed justification and exemplification of the terminology and rules is given in section 2.3. In addition to the abbreviations for the four main VV postbase types, I also use in these phrase-structure rules abbreviations for subclasses of AUX

(51)

- | | | | | |
|------|--------------------------|---|--|--|
| (a.) | V | → | Vbase ⁻⁴ INFL ⁻¹ | |
| (b.) | Vbase ⁻⁴ | → | Vbase ⁻³ (NEG) | |
| (c.) | Vbase ⁻³ | → | Vbase ⁻² (CLASS-FREE) | |
| (d.) | Vbase ⁻² | → | Vbase ⁻¹ (PreAUX) | |
| (e.) | Vbase ⁻¹ | → | Vbase (PreAUXvce) | |
| (f.) | PreAUX | → | PreAUX | $\left\{ \begin{array}{l} \text{(PreAUXvce)} \\ \text{(PreAUX)} \end{array} \right\}$ |
| (g.) | NEG | → | NEG (CLASS-FREE) | |
| (h.) | CLASS-FREE | → | CLASS-FREE (CLASS-FREE) | |
| (i.) | INFL ⁻¹ | → | (AUX) INFL | |
| (k.) | AUX | → | (MODAL) (PST) (PROG) | $\left\{ \begin{array}{ll} \text{(FUT)} & \text{(EVI-} \\ & \text{DENTIAL)} \\ \text{(FRUS-} & \text{(IMPU-} \\ \text{TRATIVE)} & \text{TATIVE-1)} \\ \text{(NEG)} & \end{array} \right\}$ |
| (l.) | IMPUTATIVE ⁻¹ | → | IMPUTATIVE (MODAL) (PST) (PROG) | |
| (m.) | INFL | → | MOOD Person markers | |

postbases (explained in 2.3.4, below) and the abbreviation PreAUXvce for Voice PreAUX, a subclass of theta-role changing syntactic PreAUX postbases (given under A. 1 in the classification in subsection 2.5.3). The negative bar levels are used as in Sadock (1985). It should be pointed out that the INFL⁻¹ node functions only in the morphological module and not in the syntactic module. There is in CSY a corresponding external syntactic INFL¹ (i.e., INFL-bar) node dominating a sentence, since INFL⁻¹ certainly has sentential scope (Steele et al. 1981:148, 159). The external syntactic relationships of INFL⁻¹ exist in the syntactic module only, and are not treated here.

It is important to add to these productive rules three lexicalized formations that are NEG postbases interacting with productive Class-Free and AUX postbases. Explanations are provided in subsection 2.3.3.

- (52) PST + NEG
 PROG + NEG
 FUT + NEG

There are some differences between these phrase-structure rules and those given in previous accounts. In these accounts, several position classes are also generated before the verb inflection (i.e., INFL), but there are no elements that can occur between these position classes. Thus, Woodbury's *subinflection* node (1981:339-41) contains three position classes before the verb inflection without branching nodes. Similarly, Fortescue's 1980 phrase-structure rule expanding the V_s (or sentential verbal affix node) basically predicts either four or three position classes before the verb inflection, and only the fourth of these position classes, V_{sub} (or affix of subjective coloration node), can branch, but only into two other V_{sub} affixes (see subsection 2.1.2).

In my analysis, however, several different types of postbases can be attached under the position classes under the AUX node: Class-Free and NEG postbases can thus occur in between postbases of the AUX type, and the IMPUTATIVE⁻¹ node, a daughter of the AUX node, dominates its own set of position classes.

A more detailed comparison with Fortescue's 1980 description of Greenlandic postbase order is appropriate at this point. As in Fortescue's analysis, I have postulated some recursive rules (f and h in 51), and it can be expected that these will overgenerate. Since my data do not happen to contain sequences of more than three productive PreAUX postbases or more than two productive Class-Free postbases, one could stipulate that rule f can apply only twice and that rule h can apply only once, but this is obviously a completely ad hoc and unsatisfactory solution.

Other similarities of Fortescue's analysis with my own include the following correspondences of categories: V_e and V_{mod} correspond to some extent to my PreAUX postbases; V_{mod} and V_{sub} correspond to some extent to my Class-Free postbase; V_{neg} corresponds to my NEG; and V_s corresponds to my AUX. Also, some of his categories, when occurring under the V_s in the sequence V_{ten} , V_{ep} , V_{sub} , are comparable to my AUX postbases in the sequence Past Tense, Progressive, Frustrative, and Evidential, with the differences that nothing corresponds to my Progressive slot, that his V_{ten} slot contains both Past and Future, and that there is a case of reversed order since my Evidential corresponds to his V_{ep} and my Frustrative corresponds to his V_{sub} .

The more substantial differences are the increased complexity of the AUX node (as compared to his V_s node), discussed earlier. It is hoped that this increased complexity will result in less recursivity and hence less overgeneration. Furthermore, I assume binary branching except for the five position classes under AUX and that AUX and INFL form one constituent, being dominated by one node, differing in these respects from Fortescue, who has multiple branching in various locations and who assumes that INFL and V_s are both sisters dominated by V.

Some striking differences exist because the contents of Fortescue's semantic categories are often very different from my morphologically based categories, which might be related to the linguistic differences between Greenlandic and CSY. In particular, there are many more postbases under V_{ep} and V_{sub} than I find in CSY; as a result, it appears that in Greenlandic many more different postbases can follow Tense than in CSY.

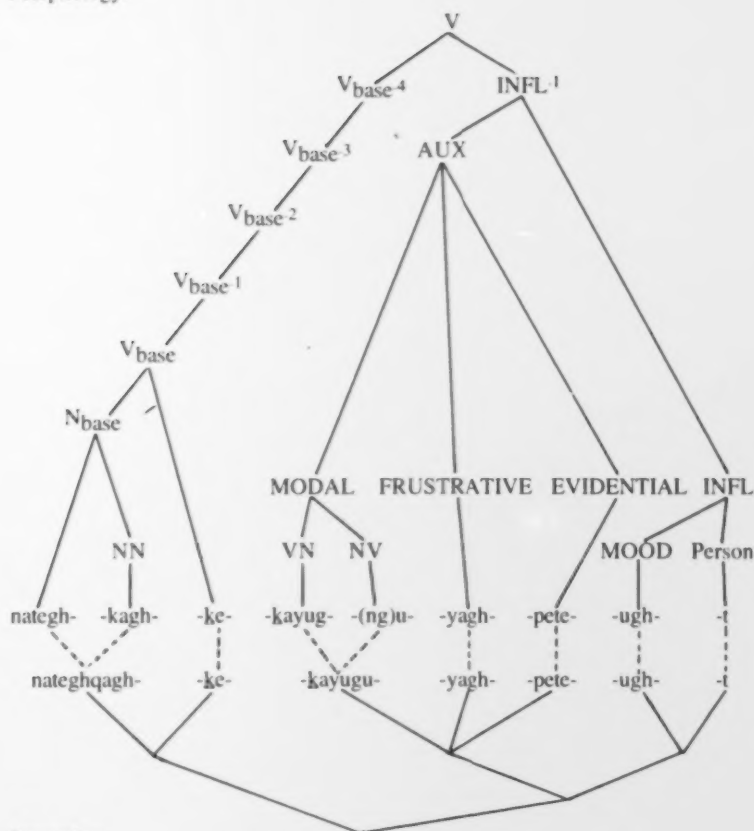
2.2.2.2.3. The Semantic Module

The semantic module interacts with the morphological module, and in the autolexical model adopted here, these semantic relationships are autonomously represented by a tree which assigns a semantic scope representation to a sentence which also has a simultaneous morphological representation. The rules of semantic scope formation needed for this representation are not given here, since in the large majority of cases the semantic tree matches the morphological tree exactly, with the important exception that every productive postbase is a terminal node regardless of whether this productive postbase is morphologically simple or complex. In other words, the lexicalized combinations of postbases are only represented in the morphology and not in the semantics, since their internal structure is invisible to the semantic scope rule, in accordance with the SIP. The semantics of these lexicalized combinations is not predictable, and therefore must be specified in the lexicon. In subsection 2.2.2.1 there is a general morphological principle (FOP) organizing the order of the lexicalized elements of branching affixes; there are no semantic principles organizing the order of the elements of lexicalized combinations. Other cases where there is no match between semantic and morphological trees are discussed in section 2.4.

Two examples of such a simultaneous morphological and semantic tree representation are 53, morphologically analyzed in 54, and 55, morphologically analyzed in 22 above in this chapter. For the purpose of simplicity, the semantic nodes are not labeled; in the morphological representation, the nodes marked NN, VN, NV, or VV dominate lexicalized postbases, and thus form lexicalized combinations of a base and a postbase or of two postbases.

(53)

Morphology:

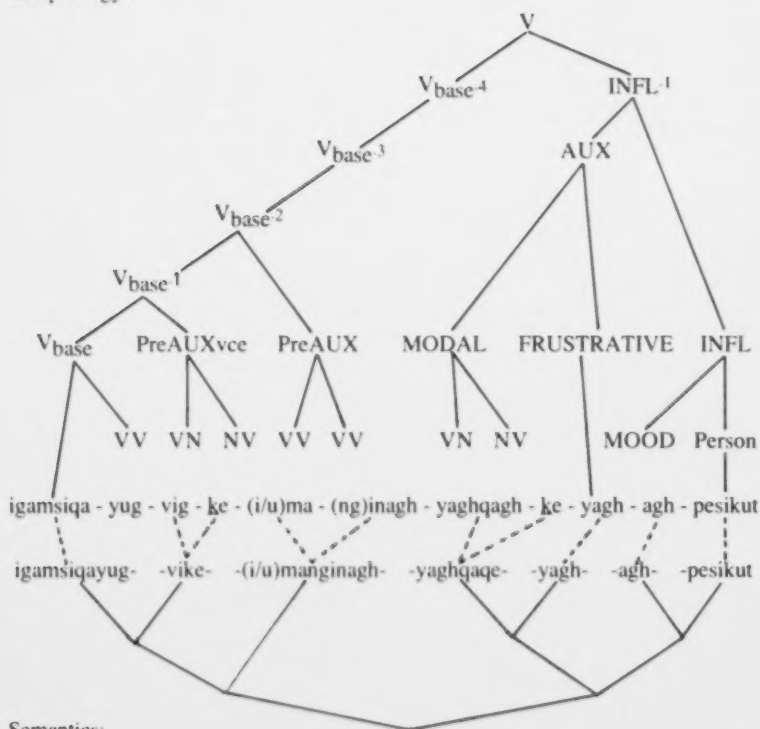


Semantics:

- (54) nateghqaghekayuguyaghetut
 nateghqagh-ke-kayugu-yagh-pete-ut
 sole.of.skin.boot-have.as.one's.N-be.able.to.V-V.in.vain-evidently.V-
 IND(3p)
 'they were used for the soles of skin boots' (APc-98)

(55)

Morphology:



2.3. A Partial Description of CSY VV Postbase Ordering

This description of CSY VV postbase ordering is based not only on my own field data and the grammars and dictionaries but also on a survey of virtually every text published in CSY in Alaska as well as on some texts published in the former Soviet Union. The CSY text material that was scanned for interesting postbase sequences amounts to the equivalent of more than 700 typewritten pages. I trust this description is fairly reliable, even though further fieldwork is necessary for gathering supplementary negative evidence and for clarifying the meaning of some postbase sequences found in untranslated texts.

In the following four subsections (2.3.1, 2.3.2, 2.3.3, 2.3.4), I justify the four main types of postbases used in the phrase-structure rules and give examples of the sequences generated by the phrase-structure rules given in 51.

2.3.1. PreAUX Postbases

Pre-AUX postbases can be morphologically defined as postbases that always occur before the AUX postbases. There are not enough data for stating meaningful ordering generalizations involving PreAUX postbases beyond the far too general phrase-structure rules given above. The PreAUX postbases do not form a semantically definable class; in my classification in section 2.5, I have grouped them under the following semantic categories, given here in alphabetical order:

- (56) Addresses expectations of speaker or hearer
 - Aspect
 - Comparison
 - Derivation of adjectival and emotional verbs
 - Manner and ease of accomplishment
 - To go and V/try to V/want to V/become a V-er
 - To pretend to V/act like V
 - Voice

2.3.2. Class-Free Postbases

Bergsland (1955:131) and Woodbury (1981:327) distinguish, on the basis of morphological criteria, between class-bound and class-free postbases. Class-bound postbases can only belong to one of the four postbase classes (i.e., NN, NV, VN, and VV), whereas class-free postbases can be either NN, when with nominal bases, or VV, when with verbal bases. The type of VV postbase called Class-Free in this work are all class free in this sense, and thus I expect that there exists for each of them an NN equivalent.

The Class-Free postbases appear to form a vaguely defined semantic group, since they all refer to a qualitative or quantitative judgment of the speaker on the action or state expressed by the verb or on the subject of the verb.

As for the PreAUX postbases, there are not enough data for stating precise ordering generalizations involving Class-Free postbases. Class-Free postbases often follow PreAUX postbases. As an illustration 57 is a chart of attested PreAUX-Class-Free sequences involving eight common Class-Free postbases. They are, with

(57)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
-aghte-, -qaghte-		2	3					
-aatagh-		2						8
-ataghagh-							7	
-laataqu-		2						
-nanigh-	1							8
-naqe-		2			5		7	
-naqute-			3					
-neghtu-		2					7	
-qaqu-		2						
-ragkiiigh-		2			5			
-rakegte-		2					7	
-yagute-		2		4				
-yug-		2		4		6	7	
-yugnagh-							7	
-yuguma-							7	

- (58) -*(ngw/w)aagh-ghllag-*
 -*ghllag-(ngw/w)aagh-*
 -(*ng*)*inagh-pagllag-* (containing -*pagllag-* 'to V very much')
 -*kanigh-pigte-*
 -*ngestagh-(ngw/w)aagh-* (containing -*ngestagh-* 'to V in a small way')
 -*ngestagh-ghllag-*
 -*rukutaagh-ghllag-* (containing -*rukutaagh-* 'for a huge one to V')

gloss and number referring to the top row of the chart: -*(ngw/w)aagh-* 'to thoroughly V' (1); -*ghllag-* 'to V in a big way' (2); -(*ng*)*inagh-* 'to only V' (3); -*kanigh-* 'to be rather V' (4); -*llegagh-* 'to V crudely' (5); -*pestaagh-* 'to truly V' (6); -*pigte-* 'to really V' (7); -*vyyiigh-* and its variant -*msiigh-* 'to kind of V' (8). Glosses for the PreAUX postbases are: -*aghte-*, -*qaghte-* 'to briefly V'; -*aatagh-* 'to V repeatedly'; -*ataghagh-* 'to V more than'; -*laataqu-* 'to luckily have V-ed well'; -*nanigh-* 'to cease to V'; -*naqe-* 'to try to V'; -*naqute-* 'to try to V'; -*neghtu-* 'to habitually V'; -*qaqu-* 'to V intermittently'; -*ragkiiigh-* 'to V fast'; -*rakegte-* 'to V quickly'; -*yagute-* 'to reach a state of V-ing'; -*yug-* 'to want to V'; -*yugnagh-* 'to be easy to V'; -*yuguma-* 'to be easy to V'.

Sequences of two Class-Free postbases also occur, listed in 58.

Class-Free postbases can also modify NEG postbases, discussed in the next subsection.

2.3.3. Negative (NEG) Postbases

NEG is of course most easily defined as a semantic class. It should be pointed out that they can also be defined morphologically to some extent, since they are never followed by Pre-AUX postbases, and can occur after some AUX postbases. Furthermore, almost all NEG postbases contain the negative postbase *-(ng)it^oe-* 'to not be N, to not be V'.

NEG postbases can occur between the PreAUX and AUX postbases or after some AUX postbases, but productive examples where a NEG postbase precedes a PreAUX postbase do not appear to exist. For example, the sequence *-yug-nghit^oe-* 'to not want to V' is extremely common, but the sequence *-nghit^oe-yug-*, found only once (59), was translated as 'to not feel like V' rather than as the semantically predictable 'to want to not V'. Therefore, it is safe to assume that the base *pinghisug-* is a lexicalized formation meaning 'to not feel like doing' and that the *-yug-* involved is the nonproductive postbase meaning 'to feel V', already encountered in subsection 2.2.1.2.

- (59) *sameng pinghisulghiini*
sa-meng pi-nghit^oe-yug-lghii-ni
 something-MD(s)do-not.V-want.to.V-INP-LCp
 '(we) who do not feel like doing something' (SI-59)

There is certainly no motivation in terms of semantic scope against these unattested (probably impossible) sequences, since the hypothetical sequences **-nghit^oe-naqe-* 'to try not to V' or **-nghit^oe-yug-* 'to want to not V' are semantically very plausible. I assume that there is a pragmatic explanation for why only one order exists and that it involves a treatment in terms of conventional implicature.

For the same pragmatic reasons, it appears that when a NEG postbase is present and when a MODAL postbase is present under the AUX node, only the sequence

MODAL-NEG postbase is possible, as shown in 60.³ Separate glosses of the postbases involved are given in the classification of subsection 2.5.3, divisions C and D.

- (60) -naqe-fqagh- 'don't V in the near future'
 -naqe-gpe- 'to not V in the near future; will not V'
 -naqe-(ng)igat⁰e- 'to never V in the near future'
 -naqe-nghit⁰e- 'to not V in the near future; will not V'
 -nayagh-nghit⁰e- 'would not V'
 -yaghqae-nghit⁰e- 'to not need to V'
 -yaghqau-fqagh- 'don't have to V'
 -yaghqau-gpe- 'to not need to V'
 -yaghqau-nghit⁰e- 'to not need to V'

The sequences involving a MODAL postbase and the PreAUX postbases -*nanigh*- 'to cease to V' and -*nanighqe*- 'to make one cease to V' in 61, exemplified in 62, appear to contradict my rule that PreAUX postbases cannot follow AUX postbases. I prefer to maintain this rule, making an exception to my classificatory principles, and to consider these postbases to be classifiable both as NEG postbases, as in 61, and as PreAUX postbases that can be followed by another PreAUX postbase or by a NEG postbase, as in 63. There is independent evidence, provided in the discussion of the order of lexicalized combinations of postbases (see subsection 2.2.2.1), that at least -*nanigh*- should be treated this way.

- (61) -yaghqau-nanighqe- 'to cause to cease to have to V'
 -yaghqau-nanigh- 'to cease to have to V'
- (62) aghyughyaghqaananiqaftut
 aghyugh-yaghqau-nanigh-kau-fte-ut
 get.old-be.supposed.to.V-cease.to.V-PST-appear.to.V-IND(3p)
 'they appeared to have ceased to be supposed to get old' (SLd-38)

³ In the remainder of this chapter, position class labels will be written in capital letters. When it is useful to treat the inflectional verb mood as a type of position class, it will be written VERB MOOD.

- (63) -nanigh-yaghtugh- 'to go and stop V-ing'
 -nanigh-nghit^oe- 'to not cease to V'

When a Past Tense postbase occurs under the AUX node, the order is most often Past Tense-NEG. The sequences -*kage-nghit^oe-* (64) and -(i/u)ma-pagigat^oe- (65) have been found only in this order and not in the reverse order:

- (64) tuqutkagenghitaqa
 tuqute-kage-nghit^oe-aqa
 kill-PST-not.V-IND(1s-3s)
 'I did not kill him' (T/43-54)
- (65) itghumapagigalnguut
 itegh-(i/u)ma-pagigat^oe-nguut
 enter-PST-V.not.often-INP(3p)
 'they hardly ever entered' (APc-33)

When the NEG postbase -*nghit^oe-* as well as the AUX postbase -(i/u)ma- 'Past Tense' or the AUX postbase -*aqe-* 'Progressive Aspect' occur in a word, the situation is more complicated. The orders Past Tense-NEG, Progressive-NEG and NEG-Past Tense, NEG-Progressive both occur, but neither is common. Examples of the sequence -*nghit^oe-(i/u)ma-* are 66 and 67, an example of the sequence -*nghit^oe-aqe-* is 68.

- (66) angyanghisimalghiit
 angyagh-nghit^oe-(i/u)ma-lghiit
 go.boating-NEG-PST-INP(3s)
 'they did not go boating' (JAa-21)
- (67) aghyughyaghqaanghisimaat
 aghyugh-yaghqau-nghit^oe-(i/u)ma-ut
 get-old-be.supposed.to-NEG-PST-IND(3p)
 'they were not supposed to get old' (T/43-39)

- (68) guunneghitaanka
 guute-nghit^oe-aqe-anka
 shoot-NEG-PROG-IND(1s-3p)
 'I am not shooting them yet' (NBK/1-9)

There is probably a pragmatic explanation for why the sequences in 66-68 are uncommon. A precise explanation is available for the relative rarity of the reverse sequences *-(i/u)ma-nghit^oe-* and *-aqe-nghit^oe-*. These occur only with the INT (Interrogative) mood and with the meaning of a rhetorical question, presupposing that what precedes *-nghit^oe-* is true. So 70 means 'is it not the case that it was a curse? (of course it was)', and 73 means 'is it not the case that you are homesick? (of course you are)'. It thus seems that in such sequences the INT mood has scope over the NEG only and not over the whole clause. Examples with the sequence *-(i/u)ma-nghit^oe-* are 69-72; examples with the sequence *-aqe-nghit^oe-* are 73-75:

- (69) puughsimanghitaki?
 puughte-(i/u)ma-nghit^oe-aki
 fool-PST-NEG-INT(3s-3p)
 'is it not the case that he fooled them?' (SL-26)
- (70) puughtingumanghita?
 puughti-(ng)u-(i/u)ma-nghit^oe-a
 curse-be.N-PST-NEG-INT(3s)
 'is it not the case that it was a curse?' (SLc-61)
- (71) uteghsimanghitat?
 uteghte-(i/u)ma-nghit^oe-at
 return-PST-NEG-INT(3p)
 'has it (a plane, inherently plural) not returned?' (SI-11)
- (72) uyvalallghumanghitawha?
 uyvala-llegh-(ng)u-(i/u)ma-nghit^oe-a=wha
 practice.sorcery-act.of.V-ing-be.N-PST-NEG-INT(3s)-ever
 'is it not the case that it was sorcery?' (SL-26)

- (73) Aghyuaqenghisin?
 aghyuqe-aqe-nghit^oe-zin
 be.homesick-PROG-NEG-INT(2s)
 'Are you not homesick?' (SLe-9)
- (74) Angayuqaghten esghaghyugaqenghisiki?
 angayuqagh-ten esghagh-yug-aqe-nghit^oe-siki
 parent-AB(2s-p) see-want.to.V-PROG-NEG-INT(2s-3p)
 'do you not want to see your parents?' (SLe-9)
- (75) kiyaghtaqenghita?
 kiyaghte-aqe-nghit^oe-a
 be.alive-PROG-NEG-INT(3s)
 'is she not still living?' (SLd-35; PU-31)

The question is then how NEG is expressed after these two postbases when the rhetorical question meaning is not intended and other verb moods are used. In these cases, the sequences *-(i/u)ma-nghit^oe-* and *-aqe-nghit^oe-* are respectively replaced by the lexicalized combinations *-(i/u)mangit^oe-* [containing *-(i/u)ma-* and the nonproductive negative postbase *-(ng)it^oe-* 'to not be V'] 'to not V in the past' and *-(ng)igat^oe-* 'to not be V-ing, to never V'. These lexicalized postbases are much more common in my data than the productive combinations involving Past Tense or Progressive Aspect and NEG postbases. Since these combinations are lexicalized, distinctions in scope between, say, Past Tense-NEG and NEG-Past Tense cannot be reflected, in accordance with the SIP. This is actually not a disadvantage, since the scope differences are most often unimportant and the intended meaning can be conveyed pragmatically. Examples of *-(i/u)mangit^oe-* are 76 and 77 with the INT mood; examples of *-(ng)igat^oe-* are 78 and 79 with the INT mood.

- (76) qepghaamangituq
 qepghagh-(i/u)mangit^oe-uq
 work-NEG.PST-IND(3s)
 'it did not work' (HEN-24)

- (77) *esghaamangisinga?*
esghagh-(i/u)mangit^oe-zinga
 see-NEG.PST-INT(2s-1s)
 'didn't you see me?' (MV-202)
- (78) *Maaten qepghiigatunga.*
maaten qepghagh-(ng)igat^oe-unga
 now work-never.V-IND(3s)
 'I am not working at the present time.' (NBK/7-25)
- (79) *Salin aghulaqigasın?*
salin aghulaqe-(ng)igat^oe-zin
 still leave-never.V-INT(2s)
 'You haven't left yet?' (NBK/4-63)

As far as the negative of the Future Tense is concerned, the expected sequence Future Tense-NEG **-lleqe-nghit^oe-* does not exist, and is replaced by the lexicalized combination *-naanghit^oe-* 'to not V in the future' (containing *-naagh-* 'to be going to V eventually' and *-nghit^oe-*). I assume that the distinction between the hypothetical productive sequences **-lleqe-nghit^oe-* meaning 'not V in the future' and **-nghit^oe-lleqe-* meaning 'in the future not V', even though logically real, is pragmatically so unimportant that *-naanghit^oe-* always takes the place of both these nonexistent sequences. An example of *-naanghit^oe-* is 80:

- (80) *neghyugnaanghituq*
negh-yug-naanghit^oe-uq
 eat-want.to.V-FUT.NEG-IND(3s)
 'he won't want to eat' (BAb-287)

The question now arises whether these lexicalized combinations are still AUX postbases or whether they are NEG postbases. There is evidence that they are actually NEG postbases, since there exist cases of *-(ng)igat^oe-* and *-(i/u)mangit^oe-*, respectively followed by Progressive Aspect *-aqe-* (examples 81 and 82) and by Past Tense *-(i/u)ma-* (examples 83 and 84). It is thus the negative element of the combination that assigns its NEG property to the whole combination.

- (81) Qayughyugigataquq qaa.
 qayugh-yug-(ng)igat^oe-aqe-uq qaa
 drink.tea-want.to.V-never.V-PROG-IND(3s) I.wonder
 'I wonder if he does not want to drink tea.' (NBK/4-63)
- (82) sakengigataqunga
 sakenge-(ng)igat^oe-aqe-unga
 catch.game-never.V-PROG-IND(1s)
 'I haven't been catching anything' (NBK/4-67)
- (83) anuqliimangisimakanga
 anuqe-ligh-(i/u)mangit^oe-(i/u)ma-kanga
 wind-provide.with.N-NEG.PST-PST-TRP(3s-3s)
 'it did not get windy' (NBK/7-18)
- (84) naafqiighagsimangisimalghii
 naafqiigh-aghte-(i/u)mangit^oe-(i/u)ma-lghii
 break.in-suddenly.V-NEG.PST-PST-INP(3s)
 'he did not break in' (NBK/10-19)

I am not sure of the precise semantic difference between these forms and the forms with the lexicalized combinations only; the longer forms seem to place more emphasis on the importance of Progressive Aspect or Past Tense. The sequence *-(i/u)mangite-(i/u)ma-* has only been found with a following Participial (INP or TRP) mood. *-(i/u)ma-* with the Participial mood forms some kind of nonlexicalized unit, indicating a vivid but nonwitnessed narrative past (see subsection 2.3.4.2). There might be a tendency for such a unit not to be broken up by a NEG postbase. One must also formulate a sort of agreement rule to the effect that a NEG postbase also containing a Past Tense or Progressive Aspect element can be followed only by an AUX Tense or Progressive postbase with compatible semantics. Since the SIP prevents the semantics from looking into lexicalized combinations, such a rule is only possible if one assumes that in the semantic tree the NEG postbase node gets marked with a Past or Progressive feature assigned to it by the morphological tree.

The NEG lexicalized combinations containing a Past Tense or Progressive Aspect element can occur before AUX postbases, and consequently these NEG postbases are not dominated by the AUX node. Since simple NEG postbases can occur under the AUX node, it is semantically plausible that there exist sequences

containing both a NEG postbase not dominated by the AUX and a following NEG postbase dominated by the AUX, but such sequences are not found in my data. Hypothetical examples are 85, modeled on 69 above, and 86, modeled on 73 above.

- (85) *puughsimangisimanghitaki?
 puughte-(i/u)mangit⁰e-(i/u)ma-nghit⁰e-aki
 fool-PST.NEG-PST-NEG-INT(3s-3p)
 'is it not the case that he did not fool them?'
- (86) *Aghyugigataqenghisin?
 aghyug-(ng)igat⁰e-aqe-nghit⁰e-zin
 be.homesick-never.V-PROG-NEG-INT(2s)
 'Is it not the case that you are never homesick?'

Additional evidence for considering these lexicalized combinations to be of the NEG type is the fact that they, like simple NEG postbases and unlike Tense and Progressive AUX postbases, can be modified and followed by Class-Free postbases, such as *-(ngw/w)aagh-* 'to V thoroughly'; *-(ng)inagh-* 'to only V'; *-kanigh-* 'to rather V'; *-pestaagh-* 'to truly V'; *-pigte-* 'to really V'; *-sugnit⁰e-* 'to seem to V'. A list of attested sequences of simple NEG followed by these postbases is given in 87. Separate glosses of the NEG postbases involved are provided in the classification in subsection 2.5.3, division C.

- (87) *-nghit⁰e-(ng)inagh-* 'to just not V'
-nghit⁰e-kanigh- 'to rather be not V'
-niit⁰e-pigte- 'to not be V-able very much'
-pangingit⁰e-sugnit⁰e- 'to appear not to be able to V'
-yaghqau-nghit⁰e-(ngw/w)aagh- 'to thoroughly not need to V'

Attested sequences with the same set of Class-Free postbases occurring after the lexicalized combinations under discussion are given in 88, and two examples are provided in 89 and 90.

- (88) *-(ng)igat⁰e-(ngw/w)aagh-* 'to thoroughly not be V-ing'
-(ng)igat⁰e-pestaagh- 'to truly not be V-ing'
-(i/u)mangit⁰e-pigte- 'to really not have V-ed'

- (i/u)mangit⁰e-sugnit⁰e- 'to appear to not have V-ed'
 -naanghit⁰e-(ngw/w)aagh- 'will not V at all'

- (89) esghiigatngwaaghanka
 esghagh-(ng)igat⁰e-(ngw/w)aagh-anka
 see-never.V-thoroughly.V-IND(1s-3p)
 'I thoroughly do not see them' (T/52-14)
- (90) kumakighnaanghitngwaaghaghpes.inga
 kumakigh-naanghit⁰e-(ngw/w)aagh-aghpesinga
 delouse-will.not.V-thoroughly-IND(2p-1s)
 'you are not going to delouse me at all' (NBK/7-16')

The corresponding sequences of Tense or Progressive Aspect and Class-Free postbases [i.e., *-aqe-(ngw/w)aagh-, *-aqe-pestaagh-, *-(i/u)ma-pigte-, *-(i/u)ma-sugnit⁰e-, and *-lleqe-(ngw/w)aagh-] are ungrammatical.⁴

From the above observations, one can predict the existence of sequences of a NEG lexicalized combination, a Class-Free postbase, and an AUX-dominated Tense or Progressive Aspect postbase, and these do indeed occur, as shown in 91:

- (91) naafqiighaghsimangitesugnisimalghiit
 naafqiigh-aghte-(i/u)mangit⁰e-sugnit⁰e-(i/u)ma-lghiit
 break.in-suddenly.V-NEG.PST-seem.to.be.V-ing-PST-INP(3p)
 'they did not seem to have broken in' (NBK/10-19)

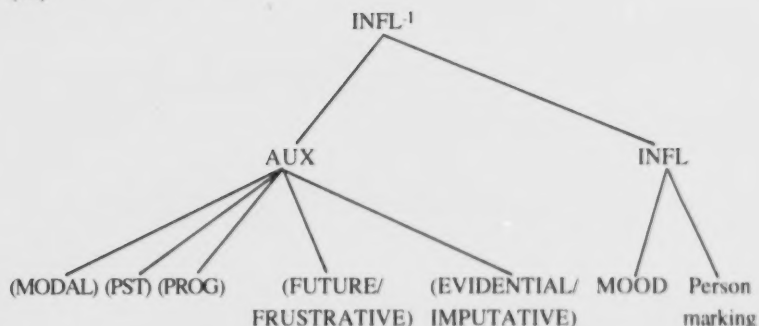
2.3.4. AUX Postbases

2.3.4.1. The AUX Node

Since there is only a small number of postbases under the AUX node and since they occur in easily definable position classes, the following description of the position classes of AUX postbases is much more detailed than that of the three other types.

⁴ By the same reasoning, the sequence *-(i/u)ma-(ng)inagh-* should also be ungrammatical. It does occur, but, as seen in subsection 2.2.1.3, there are compelling reasons for considering it a lexicalized combination.

(92)



The part of the phrase-structure rules of 51 directly relevant to the position classes of AUX postbases is repeated here as a tree in 92. Thus, the five position classes that can contain AUX postbases are (1) MODALITY (abbreviated as MODAL), (2) PAST TENSE (abbreviated as PST), (3) PROGRESSIVE ASPECT (abbreviated as PROG), (4) FUTURE TENSE and FRUSTRATIVE, and (5) EVIDENTIAL and IMPUTATIVE.

I maintain that the AUX node in CSY verb corresponds to the AUX (for AUXILIARY) category argued for by Steele et al. According to these authors, AUX is a cross-linguistic syntactic category with the following properties (Steele et al. 1981:155-56):

(93) AUX = a set of language-particular properties Aux_L such that:

- a. Aux_L is a constituent.
- b. Aux_L occurs in first, second, or final position.
- c. For most choices of L, Aux_L may attach to some adjacent element.
- d. Aux_L contains a specified (i.e., fixed and small) class of elements.
- e. These elements occur in a fixed order.
- f. Aux_L *must* include elements marking tense and/or modality.

- g. Aux_L may include, as well, elements indicating subject marking subject agreement, question, evidential, emphasis, aspect, object marking, object agreement, and negation.
- h. Insofar as these notional types can be identified across languages, their relative order does not follow from any general principles.

It appears that the AUX node in my analysis has all the properties listed above. Some explanations and qualifications are in order, however. My analysis differs from the one in Steele et al. in that they do not distinguish AUX from INFL (i.e., Inflection, such as person marking) when the two are adjacent. In such cases they consider INFL to be part of the AUX. I distinguish AUX from INFL, even though they are adjacent, and consider them dominated by a node $INFL^{-1}$. Thus, I argue that (1) my AUX is a constituent distinct from INFL, (2) that $INFL^{-1}$ is a constituent as well, and (3) that $INFL^{-1}$ is not what corresponds to the AUX as defined by Steele et al. Concerning (1), AUX is a constituent in that it is never obligatory, and also cannot occur with verbs in certain verb moods, such as the C2O and the PRO. With rare exceptions that might be due to lexicalizations of an AUX postbase with a preceding base, the nominalizing postbases *-lleg-* 'one that has V-ed or been V-ed, act or activity of V-ing' and *-neg-* 'act or activity of V-ing' occur with verbs lacking an AUX. However, INFL is always obligatory on an inflected verb, except for the particular case of verbs with noun inflection (see chapter 1, section 1) and must always be a verb mood marker and one or more person markers. As for (2), $INFL^{-1}$ is a constituent because there are, as will be seen below, various co-occurrence restrictions involving only AUX and INFL, and elements of INFL can become lexicalized with elements of AUX. Also, verbs inflected as nouns lack both the AUX and the INFL. From a syntactic point of view, $INFL^{-1}$ has scope over the whole sentence rather than over the verb. Concerning (3), it appears that the AUX node contains the semantic elements (see 93f) sufficient for characterizing it as belonging to the AUX category, and since it is preferable to have the most constrained characterization of AUX, I conclude that the AUX node, rather than the $INFL^{-1}$ node, should be considered as corresponding to the category AUX in CSY.

As far as the position of the AUX with respect to other elements is concerned, the position of AUX right before INFL can be considered a penultimate position; this position is much rarer than the first, second or final position referred to in 93b, but the possibility of a penultimate position is predicted by Steele et al. (1981:158).

Steele et al. (1981:150-51) also state that the AUX has a fixed linear internal order of elements and that no relative scope exists between them; this is certainly also the case with the CSY AUX node. It is less clear, however, that 93h (that relative order does not follow from any general principles) is the correct assumption. Indeed, in a study of verb inflectional morphology, Bybee (1985:34-35) points out that there is a statistically dominant order of Aspect, Tense, Mood, and Person inflectional affixes with respect to each other and the stem, such that they will occur in the order Verb stem-Aspect-Tense-Mood-Person (when suffixed) or in the order Person-Mood-Tense-Aspect-Verb stem (when prefixed). Bybee (1985:4-5) suggests a psychological explanation for this: the position of an affix with respect to the stem correlates with the degree of semantic relevance of the affix to the stem. In a similar vein, Foley and Van Valin (1984:223-24) state that in a clause the ordering of operators (which can be either bound morphemes or independent elements) with respect to the predicate (or verb) will tend to be Illocutionary force - Evidentiality - Tense - Status - Directional - Aspect - Predicate and suggest that the ordering reflects their scope relations. The orders of elements in the CSY AUX and INFL partially agree with the Bybee's and Foley and Van Valin's generalizations, so that one can equate Foley and Van Valin's Illocutionary force and Bybee's Mood with the CSY VERB MOOD, Foley and Van Valin's Evidentiality with EVIDENTIAL, the three authors' Tense with PAST or FUTURE TENSE, Foley and Van Valin's Status with MODALITY, and the three authors' Aspect with the PreAUX aspectual postbases. However, the generalizations do not predict, and cannot explain, why CSY has a PROGRESSIVE ASPECT position class in between PAST TENSE and FUTURE TENSE. The explanations provided by Bybee and Foley and Van Valin are valid general principles, but, as far as CSY is concerned, they will be of limited use so long as they are not complemented by principles explaining divergent orders. Thus far, I have not been able to find an explanation for such unpredicted orders.

Steele et al. also give an explanation of why the elements under the AUX should cluster together: "AUX is that part of a sentence which makes possible a judgment regarding its truth value" (1981:157). In other words, AUX is what makes a sentence out of a proposition.

2.3.4.2. The Position Classes

As noted in the preceding subsection, and as their labels indicate, position classes correspond to rough semantic groups.

In CSY, the deontic modality notions of obligation and permission are not well defined and are weakly marked, and the MODALITY position class refers primarily

to epistemic modality, even though it occasionally has such deontic connotations. In contrast, the deontic modality notions of *volition* and *ability* (sometimes grouped under the term 'dynamic modality' [Palmer 1986:102]) are well marked. It appears that volition is marked by PreAUX postbases, but ability is marked in the MODALITY position class.

The MODALITY postbase *-nage-* is hard to define; I have considered it epistemic in that it indicates that the action or state denoted by the verb is judged by the speaker as not realized but imminent. It has also deontic modality connotations, translatable as 'to intend to V'; aspectual connotations, translatable as 'to be on the point of V-ing'; and tense connotations, translatable as 'to be going to V in the near future'. I have labeled *-nage-* PROSPECTIVE, a term used by Comrie (1976:64-65) for a type of aspect in which a state is related to a subsequent situation, but it is clear from Comrie's discussion and examples that *Prospective* is probably never a pure aspect without connotations of epistemic and deontic modality.

Furthermore, it should be noted that not all epistemic modality is marked in the MODALITY position class, since *evidentiality*, under the EVIDENTIAL position class, and *Degree of confidence of the speaker*, a subclass of Class-Free postbases (see B.3 in the classification in subsection 2.5.3), are also types of epistemic modality.

PAST TENSE, PROGRESSIVE ASPECT, and FUTURE TENSE are self-explanatory. It is notable that Past Tense and Future Tense postbases, even though they are of the same semantic category, belong to different position classes. Concerning PROGRESSIVE ASPECT, I have already noted that all other aspectual distinctions are PreAUX postbases.

The postbase *-yagh-*, labeled FRUSTRATIVE, appears to occur in the same position class as FUTURE TENSE, even though there does not seem to be a close semantic relationship between the two. *-yagh-* is a mild adversative, expressing very mild disappointment or frustration and that the action or state indicated by the verb is ineffective and does not have the consequences expected or is unimportant and has no consequences. It is translatable 'to V in vain', or best as 'to V, but....'

The EVIDENTIALITY position class is self-explanatory; it also contains a postbase that is *inferential*, and I follow Palmer's (1986:70) observation that inferentials can be considered a type of evidential, since one infers from available information (i.e., evidence). IMPUTATIVE is the same position class as EVIDENTIALITY; the term "imputative" is from Leer (1985:127), and refers to a set of postbases meaning 'to say that V' or 'to think that V'. Since these postbases can function like *quotatives* and since *quotatives* can be considered a kind of evidential -- the evidence being what others said (Palmer 1986:71) -- there is a semantic

motivation for having EVIDENTIALITY and IMPUTATIVE as a single position class.

For further details as to the content of the five position classes dominated by the AUX node, see the classification under D in subsection 2.5.3.

A description of the co-occurrence restrictions existing between the members of the five position classes and the following verb mood is organized as follows. The five position classes and VERB MOOD are described in their order of occurrence in the word, and pairs of position classes and VERB MOOD are successively examined one by one, beginning with restrictions on position class 1 versus 2, then 1 versus 3, 1 versus 4, 1 versus 5, 1 versus VERB MOOD, then 2 versus 3, 2 versus 4, and so on until 5 versus VERB MOOD. For each pair, I first give the negative statements on co-occurrence restrictions, and then some observations, which will generally include positive statements about certain occurring orders. In this subsection, I describe the ordering and co-occurrence restrictions of IMPUTATIVE postbases only with respect to the preceding AUX postbases; postbases under the IMPUTATIVE-1 node are treated in subsection 2.3.4.3.

I assume that the co-occurrence restrictions are due to semantic incompatibilities, but since the precise semantics of many postbases are not yet well understood, I make no attempt to systematically explain the incompatibilities, and only state a few obvious ones.

There are AUX postbases that select a particular verb mood. Because the AUX postbase and the VERB MOOD thus form lexicalized combinations, the AUX postbase must be immediately followed by a particular mood. These AUX postbases can still be classified in particular position classes, but only with respect to the position classes preceding them. The result is that any position class between its own position class and the VERB MOOD will have to be empty. For example, the postbases *-na-* 'in order to V; V! in the future' (selecting an APO or TRP mood) and *-lgha-* 'FUTURE OPTATIVE' (selecting an IND mood) can be considered to belong to the position class of MODALITY postbases, and therefore cannot be followed by PAST TENSE, PROGRESSIVE ASPECT, FUTURE/FRUSTRATIVE, and EVIDENTIAL/IMPUTATIVE position classes, since they must immediately be followed by the selected mood. Similarly, *-aqe-* 'to V now and then' (selecting an APO mood) belongs to the PROGRESSIVE ASPECT position class, and therefore cannot be followed by the FUTURE/FRUSTRATIVE, and EVIDENTIAL/IMPUTATIVE position classes. This observation might seem trivial, since it would appear to follow from the concept of lexicalization. However, this is not so; there exist cases of lexicalized combinations of postbases with

productive postbases occurring in between the two parts, as will be shown in subsection 2.4.1.

For the sake of conciseness, glosses on postbases are not given in this subsection, but they will be easy to find by referring to the corresponding section numbers in the classification under division D in subsection 2.5.3.

There are certain AUX postbases on which I do not have enough information to warrant their inclusion in the description below; these are *-qaghnaqe-*, *-naqlaatagh-*, *-naqngu-*, *-qaghnayagh-*, *-nghhau-*, *-aqlaatagh-*, *-neghlleqe-*, *-nayuke-*, *-yuke-*, and *-yengagh-*. For example, *-aqlaatagh-* has been found followed by *-fte-/pete-* or the IND and INT moods; *-naqlaatagh-* has been found followed by *-ni-* or the IND mood; and *-nghhau-* has been found only in the sequence *-nghhau-fte-* and with the IND and INP moods. As far as the EVIDENTIAL/IMPUTATIVE position class is concerned, *-yengagh-* has been found only in the sequences *-naqe-yengagh-* and *-(i/u)ma-yengagh-* and with the IND and INP moods; *-nayuke-* is not found preceded by any AUX postbases, and is always followed by the IND mood; and *-yuke-* is preceded by postbases *-yagh-* (only one occurrence attested [Pungowiyi and Golodergen 1975:6]) and *-naagh-* of the FUTURE/FRUSTRATIVE position class, and is always followed by the IND mood.

Position class 1. MODALITY

With PAST TENSE:

Co-occurrence restrictions:

Not with *-kau-* / *-kaqe-*.

-kayugu-, *-yaghqau-*, and *-yaghqaqe-* not with *-(i/u)ma-*.

Observations:

Thus, *-naqe-* and *-nayagh-* occur only with *-(i/u)ma-*, and no MODALITY postbase occurs with *-kau-* / *-kaqe-*; however, the sequence *-nayagh-(i/u)ma-* was found only once (Angi et al. 1975:13) and was followed by a Participial mood (see below under PAST TENSE with VERB MOOD).⁵

⁵ The sequence *-naqe-kau-* occurs only when it contains the PreAUX postbase *-naqe-* 'to try to V'.

With PROGRESSIVE:

Co-occurrence restrictions:

Not with *-nayagh-*.

Observations:

The sequence *-(ng)igat^oe-nayagh-* occurs (see subsection 2.3.3). The absence of *-nayagh-* is probably not due to chance, since it has not been found with the FUTURE/FRUSTRATIVE position classes either. This absence is probably due to a degree of semantic incompatibility between *-nayagh-* and PROGRESSIVE and FUTURE/FRUSTRATIVE.

With FUTURE/FRUSTRATIVE:

Co-occurrence restrictions:

Not with *-nayagh-*.

Observations:

Same as under With PROGRESSIVE.

With EVIDENTIAL/IMPUTATIVE:

Co-occurrence restrictions:

-fte-/pete- not with *-nayagh-*.

Observations:

For semantic reasons EVIDENTIAL is incompatible with *-nayagh-*; *-ni-* does occur after all MODALITY postbases.

With VERB MOOD:

Co-occurrence restrictions:

-nayagh- not with APO.

-kayugu-, *-nayagh-*, *-yaghqau-*, *-yaghqaqe-* not with OPT and VFO.

Position class 2. PAST TENSE

With PROGRESSIVE:

Co-occurrence restrictions:

None.

Observations:

However, only one example (Apassingok et al. 1985:12) has been found for the sequence *-kaqe-aqe-*, and none for the sequence *-kau-aqe-*. *-(i/u)ma-aqe-* is rare when not followed by a Participial mood (see PAST TENSE with VERB MOOD below).

With FUTURE/FRUSTRATIVE:

Co-occurrence restrictions:

Not with *-lleqe-*, *-naagh-*.

Observations:

The sequences of PAST TENSE and FUTURE TENSE are semantically contradictory, and therefore do not occur.

With EVIDENTIAL/IMPUTATIVE:

Co-occurrence restrictions:

None

With VERB MOOD:

Co-occurrence restrictions:

-kau-, *-kaqe-* not with CDO, OPT.

-(i/u)ma- not with CSO.

Observations:

The Participial mood is extremely frequent with *-(i/u)ma-* and this combination is characteristic of and especially common in *ungipaghaatet*. Combinations with the PROGRESSIVE and FRUSTRATIVE in between *-(i/u)ma-* and a Participial mood (i.e., *-(i/u)ma-aqe-*, *-(i/u)ma-yagh-*, and

-(i/u)ma-*aqe-yagh-* followed by a Participial mood) are attested. All these combinations are discussed in chapter 1, subsection 1.6.3.3. The Negative Past Tense -(i/u)mangit⁰e- can occur before -(i/u)ma- followed by a Participial mood (see subsection 2.3.3). INP can also occur with -*kau-*, and TRP, with -*kake-*. The sequence -(i/u)ma- with VFO is attested once (Apasingok et al. 1985:134). Some of the above co-occurrence restrictions might be coincidental, since there are not many data. For example, CDO only with -(i/u)ma-; CSO only with -*kake-*, -*kau-*.

Position class 3. PROGRESSIVE

With FUTURE/FRUSTRATIVE:

Co-occurrence restrictions:

None.

Observations:

There is only one example of the sequence -*aqe-lleqe-* in my data (T/52-24). The sequences -*aqe-naagh-* and -*aqe-yagh-* are well attested.

With EVIDENTIAL/IMPUTATIVE:

Co-occurrence restrictions:

None.

With MOOD:

Co-occurrence restrictions:

Not with CDO, OPT.

Observations:

The sequence -(ng)igat⁰e-*aqe-* occurs with the IND mood (see subsection 2.3.3). The fact that the sequence -*aqe-* with CDO was not found might be coincidental. The sequence -*aqe-* Participial mood is discussed in chapter 1, subsection 1.6.3.3.

Position class 4. FUTURE/FRUSTRATIVE:

With EVIDENTIAL/IMPUTATIVE:

Co-occurrence restrictions:

-naagh- not with *-pete-*.

Observations:

The fact that the sequence *-naagh-pete-* was not found might be coincidental. *-ni-* can occur after all FUTURE/FRUSTRATIVE postbases.

With MOOD:

Co-occurrence restrictions:

-lleqe- not with APO, CDO, CQO, CSO, CIO, IPO, OPT, TPO, VFO.

-yagh- not with CQO, CIO, IPO, OPT, TPO, VFO.

Observations:

Thus, *-lleqe-* occurs with the IND, INT, and Participial moods only. There are not enough data about *-naagh-* and VERB MOOD to reliably indicate co-occurrence restrictions; in my data, it occurs only with IND and VFO. The sequence *-yagh-* Participial mood is discussed in chapter 1, subsection 1.6.3.3; *-yagh-* is common with CDO; I would expect *-yagh-* to occur with VFO for reasons explained in chapter 6.

Position class 5. EVIDENTIAL/IMPUTATIVE:

With MOOD:

Co-occurrence restrictions:

-fte-/-pete- not with APO, CDO, CQO, CSO, CIO, INP, IPO, OPT, TPO, TRP, VFO.

-ni- not with CDO, CIO, IPO, OPT, TPO, VFO.

Observations:

Thus, *-fte-/-pete-* occurs only with the IND and INT moods; it is the only AUX postbase that never occurs with a Participial (INP or TRP) mood. There are clear semantic reasons for this: *-fte-/-pete-* is an Evidential, and the

Participial moods indicate that there is no evidence. Thus, *-ni-* occurs before the following verb moods: APO (most commonly), CQO, CSO, IND, INT, INP, TRP; *-aqe-* selecting the APO mood (see division D. 3 in the classification in subsection 2.5.3) does not occur after *-ni-*. The nonoccurrence of CDO, CIO, and OPT after *-ni-* might be coincidental.

2.3.4.3. The IMPUTATIVE-1 Node

The IMPUTATIVE postbase *-ni-* 'to say that one is V-ing or being V-ed' (classified under D. 5.2 in the list in subsection 2.5.3) is a special case in that it can be followed by its own set of AUX postbases. The other IMPUTATIVE postbases *-nayuke-* and *yuke-* have never been found to occur followed by AUX postbases, but this is probably because so few occurrences are found in my data. The rule generating AUX position classes after *-ni-* is 511, repeated here as 94. This rule is based on the assumption that several AUX postbases in a row can follow *-ni-*, but no more than one AUX postbase ever occurs in that position in my data, something for which I have no explanation. I also have no explanation why it is only the first three AUX position classes that can occur after *-ni-*, and not all five. As covered in subsection 2.4.2, there is certainly no semantic explanation for this.

(94) IMPUTATIVE-1 → IMPUTATIVE (MODAL) (PST) (PROG)

As a result of this rule, *-ni-* can follow the four preceding AUX postbase classes and can in turn be followed by AUX postbases of three position classes. This is illustrated in the attested sequences (95, 97, 99, 101, 103) and the corresponding examples (96, 98, 100, 102, 104).

(95) After MODALITY, followed by PAST TENSE:

-naqe-ni-kau-
-naqe-ni-(i/u)ma-

- (96) *utaqiinaqnikaaguq*
utaqa-i-naqe-ni-kau-(g)uq
 wait.for-HALF.TR-PROSP-say.that.V-PST-IND(3s)
 'he, said he, would wait' (NBK/10-39)

- (97) After PAST TENSE, followed by *-na-* selecting the TRP mood, which can be considered to belong to the MODALITY position class:

-(i/u)ma-ni-na-

- (98) nangenqaamaninakefsikut
nangenqagh-(i/u)ma-ni-na-kefsikut
continue on.to.destination-PST-say.that.V-FUT.OPT-TRP(2p-1p)
'say that we continued on to our destination' (SI-112)

- (99) After PAST TENSE, followed by PROGRESSIVE ASPECT:

-kau-ni-aqe-
-(i/u)ma-ni-aqe-

- (100) qavaqaaniiqit
qavagh-kau-ni-aqe-iit
sleep-PST-say.that.V-PROG-IND(3p-3p)
'they are saying that they had slept' (SLb-22)

- (101) After a NEG postbase containing a lexicalized Future postbase, followed by PROGRESSIVE ASPECT:

-naanghit^oe-ni-aqe-

- (102) aghulaqnaanghinniiqaaten
aghulaqe-naanghit^oe-ni-aqe-aaten
leave-NEG.FUT-say.that.V-PROG-IND(3s-2s)
'he is saying that you will not leave' (VA-155)

- (103) After FRUSTRATIVE, followed by PROGRESSIVE ASPECT:

-yagh-ni-aqe-

- (104) *kaatkayuguyaghniqaat*
kaate-kayugu-yagh-ni-aqe-aat
 come-be.able.to.V-V.but-say that.V-PROG-IND(3p-3s)
 'they say that it was able to come' (BAB-145)

In such sequences, it is obvious that *-ni-* is not simply inserted between two AUX position classes. If that were the case, the sequence *-naqe-ni-kau-* (96) would violate the co-occurrence restrictions of subsection 2.3.4.2, Position class 1, Modality, stating that the sequence **-naqe-kau-* does not occur. Similarly, the sequence *-(i/u)ma-ni-na-* (98) is possible, whereas **-(i/u)ma-na-* would be ungrammatical; and the sequence *-naanghit^oe-ni-aqe-* (85) is possible, whereas the sequence **-naanghit^oe-aqe-* would be ungrammatical (see subsection 2.3.3).

2.4. Mismatches between the Morphological and Semantic Modules

There exist in CSY mismatches between the order of elements needed by the semantic scope rule and the one needed by the morphological rules of postbase ordering. When the scope rule clashes with the morphological rules of relative ordering, the morphological rules win out, so that certain semantically expected orderings are prevented, which is according to Sadock's principle that constraints on morpheme ordering are inviolable (1985:408).

In hierarchical models of grammar, it is necessary to correct the discrepancies between the semantic scope and the order of affixes. In order to do this, Pesetsky (1985:215-17) extends the use of a Quantifier Rule (QR) to a rule of affix movement in logical form, which has the effect of correcting the scope of an affix. This device is particularly useful for solving bracketing paradoxes. The problem with it is that if one allows QR to apply both across the morphology and the syntax, it becomes difficult to constrain it. Furthermore, there is no explanation why QR should be obligatory in morphology, since its use in syntax has always been optional (Di Sciullo and Williams 1987:75). In autolexical syntax it is not necessary to resort to such a device, since cases of anomalous scope can be predicted from the interaction of the rules of morphology with the rules of semantics without the need for additional rules.

The subsections below provide case studies showing that the morphological and semantic modules postulated in autolexical syntax are necessarily independent in a description of CSY VV postbase morphology. Covered in 2.4.1 are lexicalized

combinations that are split by a productive postbase. In 2.4.2 is a discussion of postsyntactic derivation forced by the semantic module.

Within VV postbase grammar, it is very likely that it is also possible to demonstrate the necessity of separating a morphological representation from a syntactic representation. However, I have postponed an examination of the interaction between the morphological and syntactic modules for a later study.

2.4.1. "Split" Lexicalized Combinations

In CSY, it is sometimes possible to insert a productive postbase between two elements of a lexicalized combination which is productive itself, and it is clear that the lexicalized combination remains lexicalized. I use the term "splitting" for this phenomenon; I prefer not to refer to this phenomenon as a type of infixation, since infixation has been traditionally used for the placing of an affix somewhere within the phonological material of a stem and this is not what happens in CSY. In CSY, it is clear that the internal structure of the lexicalized combination is maintained in the morphological representation and that the splitting element must go between the two elements of the lexicalized combination of postbases without the need to refer to its phonological structure.

Since this is obviously a very marked type of construction, it involves only a small number of lexicalized branching postbases and a small number of splitting postbases. Two cases are considered here; several other sequences of what looks like postbases with split lexicalized postbases exist, but these might have to be interpreted as productive sequences and I have taken care in excluding from this discussion any order that could be interpreted in this more straightforward manner.

Several VV postbases that are lexicalized combinations of a VN postbase and an NV postbase can be involved in splitting; they are *-kau-* 'Past Tense', containing the VN postbase *-kagh-* 'one that has V-ed' and the NV postbase *-(ng)u-* 'to be V' and the Modality postbase *-yaghqau-* 'to be supposed to V' from the VN postbase *-yaghqagh-* 'something that will V' and again the NV postbase *-(ng)u-* 'to be V'. These combinations are semantically transparent, but, as stated in subsection 2.2.1.3, they must nevertheless be treated as lexicalized because the transitivity requirements of their elements can be violated. Indeed, even though *-(ng)u-* by itself only forms intransitive verbs from nouns, both *-kau-* and *-yaghqau-* occasionally occur with transitive verbs.

As far as the postbase *-yaghqau-* 'to be supposed to V' is concerned, its two elements can be split apart by the productive NN postbase *-ghhagh** 'little N', and the resulting sequence means 'a little bit be supposed to V' and not the expected 'to

be a little one that is supposed to V', which would be predicted by the scope rule. A productive NEG postbase, including *-nanigh-* 'to cease to V' (see subsection 2.3.3), always appears to follow this sequence, and the resulting sequence then means 'not a little bit be supposed to V'. Examples are 105-108; in these and all the other examples below, the split lexicalized postbases are in boldface.

- (105) aaghghagsaghqaghhaanghiinguq
 aaghghaghte-**yaghqagh-ghhagh*-(ng)u-nghit⁰e-ngugh-Ø**
 change.one's.mind-**supposed.to.V-little.N-be.N-NEG-INP-ABs**
 'the one that did not want to change his mind one little bit' (BAB-13)
- (106) iiksaghqaghhaananighluteng
 iike-**yaghqagh-ghhagh*-(ng)u-nanigh-luteng**
 come undone-**supposed.to.V-little.N-be.N-NEG-AP0(3p)**
 '(the eagle's claws) were totally unable to get loose (from the back of the whale)' (SLC-108)
- (107) kaynguyugsaghqaghhaagpenaki
 kaynguyugte-**yaghqagh-ghhagh*-(ng)u-gpe-naki**
 put.to.shame-**supposed.to.V-little.N-be.N-NEG-AP0(3p-3p)**
 '(they were) not in the least amount being supposed to put them to shame'
 (SLC-46)
- (108) naamakesaghqaghhaanghitut
 naamake-**yaghqagh-ghhagh*-(ng)u-nghit⁰e-ut**
 fit-**supposed.to.V-little.N-be.N-NEG-IND(3p)**
 '(round pegs) are not in the least supposed to fit (into a square hole)' (SI-84)

It would of course be possible to posit here a lexicalized postbase *-yaghqaghau-*. This seems undesirable, since (1) *-yaghqau-* and *-ghhagh*-* are both productive postbases, which is the case with all postbases involved in splitting, and since (2) *-yaghqaghau-* can be transitive, exactly like *-yaghqau-* (see example 107). However, the resulting combination is idiosyncratic from a semantic point of view, since it means 'a little bit be supposed to V' and not the semantically predictable 'to be a little one that is supposed to V'.

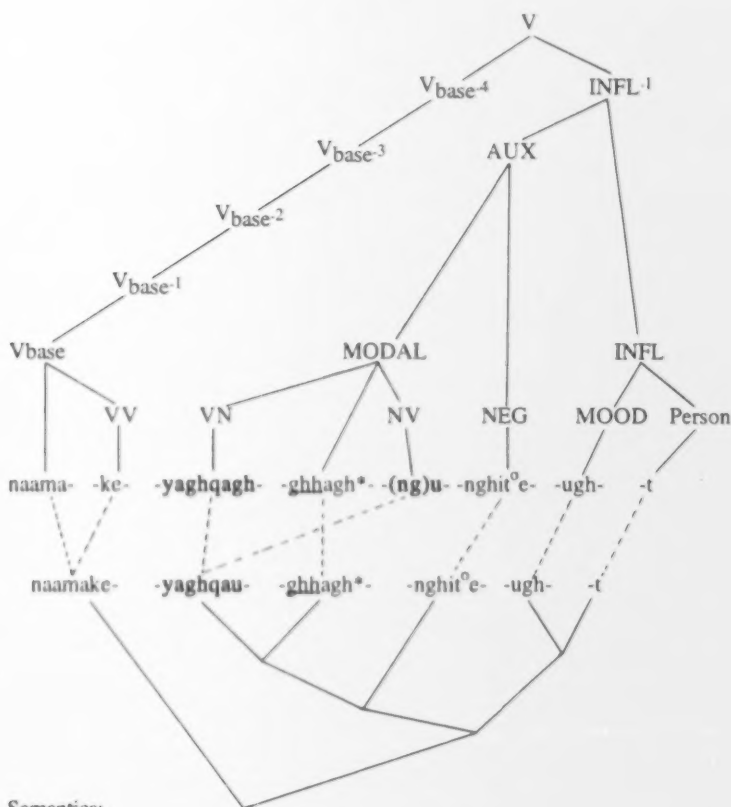
One can solve this mismatch by postulating, in an autolexical model, a semantic representation different from the morphological representation. The morphological

representation will have the morphemes in the same order as in the surface morphology, according to the principle that morphological representations win out over other representations; but in the semantic representation, the postbase *-ghhagh** will follow *-yaghqau-* and precede the NEG postbase.

It is apparent that *-ghhagh** can only occur within *-yaghqau-*, since the semantically predictable sequences **-yaghqau-ghhagh** as well as **-ghhagh*-yaghqau-* are ungrammatical. The postbase *-ghhagh** happens to be an NN postbase; and thus the only position where it can go when it has semantic scope over *-yaghqau-* is in between the VN *-yaghqagh-* and the NV *-(ng)u-*, so that the

(110)

Morphology:



Semantics:

morphologically correct sequence VN-NN-NV is obtained. In this fashion, the modular approach of autolexical syntax is useful as a device for looking into lexicalized combinations and separating them. As a result of this possibility, it is necessary to modify the FOP (subsection 2.2.2.1) as follows:

(109) Fixed Order Principle (Revised Version):

A lexicalized pair of affixes will be a subset of a set of affixes that occur in a fixed order relative to one another, and can be split by a set of productive affixes.

Thus, in example 108, the morphological and semantic trees in (110) are needed. For the purpose of simplicity, the semantic nodes are not labeled.

Another case of splitting involves the Past Tense postbase *-kau-*, a lexicalized combination of the VN postbase *-kagh-* 'one that has V-ed; one that has been V-ed' and the NV postbase *-(ng)u-* 'to be N'. As in the preceding case, the NN *-ghhagh** splits the combination. The example sentence given in 111 is from an *ungipaghaan* (traditional tale) in which a little girl was freed by her older brothers from a giant who had kept her captive, and they are now being chased by the giant. Since the girl had been living in a supernatural place (in the wilderness with the giant) for a long time, she is expected to have acquired some supernatural powers. Therefore, one of the brothers asks her if she does not have some power which could stop the fast approaching giant:

(111) Aghnaghaghaghmi whani sallgaanaqegpenang kilgaani
qavaghquqaghhaaguten.

aghnaghagh-ghhagh*-mi wha-ni sa-llgagh-(ng)u-naqe-gpe-nang kilgaa-ni
qavaghqugh-kagh-ghhagh*-(ng)u-uten

little.girl-little.N-LCs here(DA:R)-LC something-one.with.a.little.N-be.N-
PROSP-NEG-APO(2s) wilderness-LCp sleep.a.long.time-
one.that.has.V-ed-little.N-be.N-IND(2s)

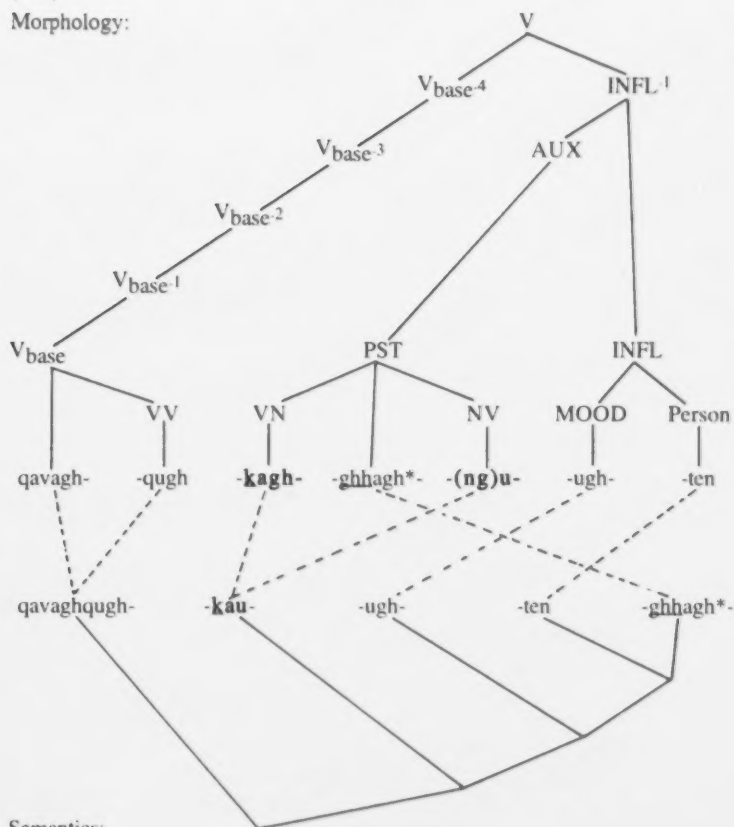
'Little girl here! You don't intend to be one with a little something? You,
little one, have slept a long time in the wilderness.' (SLb-22)

In this sentence, the splitting *-ghhagh**- is a sort of word-internal "small clause" (Woodbury 1985) coindexed to the subject of the verb, which is here the little girl. It is an expressive device the brother uses to soften his request to the little girl. Thus, *-ghhagh**- can be considered to have semantic scope not over the whole verb, but only over the subject person marker under the INFL. Again, the morphological NN property of *-ghhagh**- will ensure that it will be placed between the VN *-kagh-* and the NV *-(ng)u-* in the morphology. The autolexical tree representation is given in 112.

As a conclusion to this subsection, it should be noted that the above data are

(112)

Morphology:



Semantics:

very problematic for the principle of adjacency in morphology. The adjacency condition is based on the idea that only the immediate context determines the conditions under which an affix may occur or not. Muysken (1986:636-37) provides the following formal statement of the adjacency condition:

- (113) If the affixation of *a* is dependent on the presence of *b*, where *b* can be either an affix or a feature, then *b* must be contained in the cycle adjacent to *a*.

Arguing against the position class device, Muysken correctly points out that the adjacency condition cannot be fulfilled in such a device, because in the flat tree structure model presupposed by it, all affixes are contained in one unique cycle. As a result, there cannot be any adjacent cycles at all. The above data, however, show that the adjacency condition is not a universal property of all affixation and therefore that it is not a satisfactory argument against the position class approach.

2.4.2. Postsyntactic Derivation and the Semantic Module

A clash of the morphological and semantic modules can be resolved by a recourse to postsyntactic derivation. It involves constructions with the postbases *-ni-* 'to say that V' and *-na-* 'in order to V', followed by the APO mood, and the reader is referred to the discussion of the features of these constructions in chapter 1, subsection 1.6.3.5, examples 149-155.

As seen in subsection 2.2.2.2, there exist in CSY internal syntax strict constraints on possible sequences of postbases. These constraints are morphological and distinct from the restrictions on semantically well-formed sequences of postbases. As a result of this situation, the problem of semantically well-formed sequences of postbases that are impossible for purely morphological reasons presents itself. For example, the semantically well-formed sequence **-ni-yagh-* 'to say in vain that V' is not allowed by the morphology, as seen in the phrase-structure rule (94). Thus, the word

- (114) *puughhniyaghtunga (...)
 puughte-ni-yagh-tunga
 fool-say.that.V-V.in.vain-IND(1s)
 'I said that he fooled me, but...'

is ungrammatical. The problem is solved by resorting to the syntax: in the following grammatical sentence (115), the appropriate APO inflection is added to *puughte-ni-*, ending it as a word, and *-yagh-* is added to the semantically empty verb base *pi-*, in a fashion reminiscent of the *do-support* transformation in English. Thus, the syntactic module comes to the rescue when a semantically plausible construction is disallowed by the morphological module.

- (115) Nanumeng puughnnilunga piyaghtunga ipanguftuq.
 nanugh*-meng puughte-ni-lunga pi-yagh-tunga ipa-(ng)u-fte-uq
 polar.bear-MDs fool-say.that.V-APO(1s) do-V.in.vain-IND(1s) truth-
 be.N-apparently.V-IND(3s)
 'I said he fooled me about a polar bear but it was true.' (SI-65)

The resulting construction formally looks like the one with *-ni-* functioning as a complementizer, discussed in chapter 1, subsection 1.6.3.5, but it is semantically quite different in that *-ni-* has the full meaning of the embedding verb and that *pi-*, syntactically the higher verb, is semantically empty.

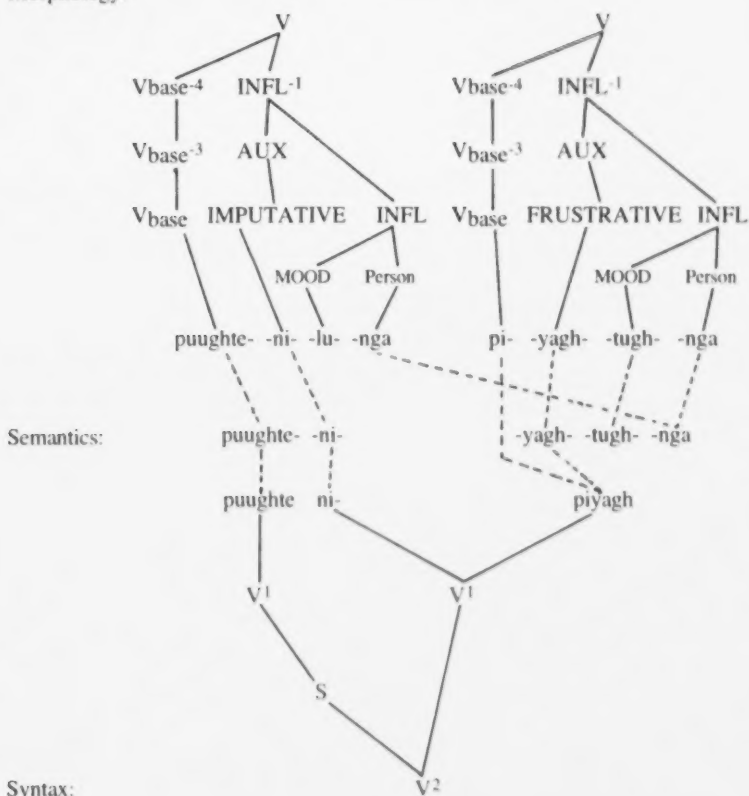
The word order is always lower verb-higher verb, thus ensuring that the postbase order is still correct for scopal interpretation. In other syntactic constructions, there is no such constraint on the position of a subordinate verb in the APO mood with respect to the main verb. For sentence 115, I have provided in 116 a tentative and partial autolexical representation of the morphological module (on the top), the semantic module (in the middle, without nodes), and the syntactic module (on the bottom).

The same construction exists for *-na-* 'in order to V', which, as mentioned in chapter 1, cannot be followed by any postbase at all. Therefore, if the postbases *-aqe-* 'PROGRESSIVE ASPECT' or *-yagh-* 'to V in vain' need to be added to *-na-*, the empty base *pi-* is used, as seen in 117 and 118.

- (117) Allameng ivenruutengnaluni piiqsaghtuq (...)
 alla-meng ivenruute-nge-na-luni pi-aqe-yagh-tuq
 other-MDs outboard.motor-acquire.N-in.order.to.V-APO(3s) do-PROG-
 V.in.vain-IND(3s)
 'He would like to get another outboard motor, but...' (HEN-17)

(116)

Morphology:



- (118) tukfighnalukek piiqak
 tukfigh-na-lukek piiqak
 buy-in.order.to.V-APO(3s-3d) do-PROG-IND(3s-3d)
 'he wants to buy it (outboard motor)' (HEN-21)

Like *-na-*, the postbase *-yaqu-* 'NEGATIVE OPTATIVE', must be followed by the APO. If another postbase, such as *-lgha-* 'FUTURE OPTATIVE', needs to be added, as in 119, to convey the total meaning 'don't ever in the future', *pi-* is used.

- (119) *qiivyaqunang pilghaaten*
qiive-yaqu-nang pi-lgha-uten
 turn.around-NEG.OPT-APO(2s) do-FUT.OPT-IND(2s)
 'don't turn ever around in the future' (SLb-12)

To conclude, the morphological and semantic modules postulated in the theory of autolexical syntax must be considered independent for a description of CSY VV postbase morphology, since, as shown in subsection 2.4.1, there can be striking mismatches between postbase order and semantic scope in combinations of postbases and since, as shown in subsection 2.4.2, in cases where principles of morphology prevent a semantically well-formed construction, the semantic module can force postsyntactic derivation to take place.

2.5. A Classification of VV Postbases

The purposes of this classification, presented in full in subsection 2.5.3, are (1) to provide a complete list of all the VV postbases of CSY and (2) to aid in the discovery of relationships between postbase syntax and the syntax of independent particles, in keeping with the general goals of this work. The classification pinpoints possible types of overlapping or mutual exclusiveness between the semantics of postbases and the semantics of particles. For the purposes of the discussion in chapter 6, my classification has interesting results. Certain semantic groupings are conspicuously absent, since we would expect them to exist from comparison with other Eskimo languages.

As a listing of all the productive verb elaborating postbases of CSY, this classification is not intended as a postbase dictionary, but it does complement the postbase dictionary in Badten et al. (1987: 269-312) (part of a work that is a second preliminary version of a dictionary that was originally edited by Steven Jacobson). My list contains more postbases than Badten et al. This is due to different methods of collecting postbases. I gathered postbases by an examination of all texts, sentences, and grammatical descriptions in my corpus, only occasionally directly gathering information on postbases from my consultants. Badten et al.'s method was primarily through elicitation from native speakers, departing from postbases found in Rubtsova (1971) or from CAY cognates. Since Rubtsova and the Soviet works in general do not attempt to be complete in their lists of postbases and since many CSY postbases do not have CAY cognates, a number of postbases have been overlooked as a result of this method.

I also differ from Badten et al. in that I believe their dictionary includes some postbases which I would consider frequent combinations of two perfectly productive postbases, but are apparently considered to be lexicalized combinations by Jacobson. This does not mean that our criteria for distinguishing lexicalized combinations from fully productive sequences are different; on the contrary, I have attempted to closely follow Badten et al.'s criteria. We have drawn separate conclusions from different limited data bases; and it is likely that a detailed discussion and comparison of these data bases would lead to an elimination of the differences (favoring either view).

The postbases occurring in Badten et al. (1987) I consider to be common productive combinations are *-kaayagh-* or *-kaqsagh-* 'to have V-ed fruitlessly; to have V-ed but...' (p. 277), actually *-kau-* or *-kaqe-* 'to have V-ed' and *-yagh-* 'to V but...'; *-(i/u)mafte-* 'how much subject evidently has V-ed' (p. 285), actually *-(i/u)ma-* 'to have V-ed' and *-fte-/pete-* 'to evidently V'; and *-yaghpete-* 'to evidently have V-ed but in vain' (p. 307), actually *-yagh-* (see above), and *-fte-/pete-* (see above).

The originality of my classification is due to the fact that it is primarily based on the morphological ordering facts which were extensively discussed in subsection 2.2.2.2. A secondary criterion of classification is semantic, and a tertiary criterion is syntactic. I am not claiming, however, that syntactic criteria are unimportant in matters of postbase classification, since there exist very detailed primarily syntactic and residually semantic classifications of postbases for Greenlandic Eskimo (Bergsland 1955:89-138) and for CAY. Rather, I intend to demonstrate that a meaningful classification based on morphological ordering criteria is also possible.

My classification thus corresponds to some extent to Fortescue's classification of the postbases of Greenlandic, which is also primarily based on order and meaning (1983:4, 98-102). There are, however, differences in the primary classificatory cuts in that Fortescue's semantic categories are used in his phrase-structure rules whereas I primarily use the four morphological types PreAUX, Class-Free, NEG, AUX in my rules. The extent of the differences can be sensed by comparing the outline of Fortescue's classification (given in subsection 2.1.2) with my own outline in subsection 2.5.2.

From the semantic point of view, my classification also differs from the extant semantic classifications, such as Fortescue (1980, 1983), and Bergsland (1955), in that it is carried through to a level of fine-grained semantic detail not reached in these other classifications. Since all semantic classifications of postbases are primarily based on *a priori* semantic distinctions, it is of course undemonstrated that there is any psychological reality to such fine semantic detail. I trust that further study with or by native consultants will support or reject the validity of these semantic distinctions.

2.5.1. Conventions and Organization of Entries

It is hoped that the list in subsection 2.5.3 is fairly complete as far as productive or possibly productive postbases are concerned. All identified productive, marginally productive, and possibly productive postbases are given. For the sake of completeness, the nonproductive postbases that are etymologically related to productive postbases are also included in this list. As a rule of thumb, I have excluded from this classification every dubious morphological element for which no more than one example could be found.

An outline of the list is given in subsection 2.5.2. As far as the arrangement of entries within the lowest subsection in the list (2.5.3) is concerned, the following conventions are used: Every nonindented line indicates the beginning of a postbase entry, given in bold. A postbase entry may or may not be separated from another postbase entry by a line space. When there is no line space between entries, these entries are clearly etymologically related. An entry taken from Badten et al. (1987) includes the following items, in this order:

(a) the form or forms of postbases, as given in Badten et al. (with the few notational differences given in chapter 1, subsections 1.6.1 and 1.6.2);

(b) the meaning of the postbase, as given in Badten et al.;

(c) additional morphophonemic information in parentheses, such as the indication (V > e), meaning that all the vowels of certain bases, with the exception of that of the first syllable of a base, can be neutralized to [ə] <e>, when followed by this postbase;

(d) the indications (p.) if the postbase is productive, (n.p.) if the postbase is nonproductive, or (marginally productive);

(e) the indication (BAb), showing that the preceding information is from Badten et al. (1987);

(f) corrections and additions, which are the responsibility of the author of the indicated source.

(g) the same information as (b) through (f) above for a meaning of the postbase that selects a particular verb mood; postbases selecting a particular verb mood have the indication "only with (verb mood)" at this point;

(h) etymologically related NN, NV, or VN forms, with occasional references and cross-referencing to homonymous and semantically related postbases occurring in other sections, with the relevant section numbers; such cross-references are always given in the environment "(see also: [postbase] [division letter(s) and number(s)]]"; NEG postbases are also cross-referenced to the corresponding nonnegative postbase, if such a postbase exists.

An entry not from Badten et al. gives the same information as in (a) through (d) and (g) except, of course, that the author of the indicated source is responsible for all of it. In item (d) indications such as (p.), (n.p.?) are often given, meaning that the postbase is probably productive, or probably nonproductive, but I do not have enough data to be certain.

After the information of items (a) through (g), examples may occur. Examples are given only under postbases that are not known to be fully productive. Examples of lexicalized combinations of bases and fully productive postbases are never given, since they can easily be found in Badten et al. (1987). In a few cases, I have given examples of some related NV postbases of particular interest.

Every example contains the form, the gloss, and a reference. It is followed by "cf." and the base or root to which the postbase has been attached, again with gloss and references. In some cases, the bare base was not found in the data, and then the same base with another postbase is given, thus providing evidence at least for the presumably correct morpheme boundaries. In some cases, the bare base was not even found with another postbase, for which "Derivation uncertain" is usually given. If no reference is given with the example, the reference for the bare base on the next line is also valid for that example. Since the majority of the examples are from Badten et al. (1987), and therefore occur on the same dictionary page as the bare base, this will often be the case.

2.5.2. Outline of Classification

This list is organized into four divisions: A. PreAUX Postbases, B. Class-Free Postbases, C. Negative Postbases, and D. AUX Postbases, corresponding to the four types of postbases discussed in subsection 2.3.4. The five numbered sections under D are given in the same order as the five position classes they represent. For ease of reference to the classification, I provide here an outline, with the titles of all divisions, subdivisions, sections, and subsections:

A. PreAUX Postbases.

1. Voice.

- 1.1. Detransitivizing and half-transitive.
- 1.2. Transitivity and transitive.
 - 1.2.1. Causatives.
 - 1.2.1.1. Causatives (not compound-verbal).
 - 1.2.1.2. Causatives (compound-verbal).
 - 1.2.2. Comitatives.
 - 1.2.3. Instrumental.
 - 1.2.4. Deriving actives from statives.
 - 1.2.5. Other transitivity or transitive.

2. Derivation of adjectival or emotional verbs.

- 2.1. With adjectival verbs.
 - 2.1.1. To be or become V to a certain degree.
 - 2.1.2. To be in a state of V.
 - 2.1.3. To reach a state of V.
 - 2.1.4. To pretend to be V.
- 2.2. With emotional verbs in particular.
 - 2.2.1. Intransitive.
 - 2.2.2. Transitive.
 - 2.2.3. To habitually be V.

3. To go and V, try and V, want to V, become a V-er.

- 3.1. To go and V/miss the event of V.
 - 3.1.1. To go and V.
 - 3.1.2. To miss the event of V.
- 3.2. To try and V/want to V.
 - 3.2.1. To attempt to V/try to V.
 - 3.2.2. To want to V.
- 3.3. To become a V-er.
 - 3.3.1. To be time to V.
 - 3.3.2. To become able to V/learn to V.
 - 3.3.3. To become a big/frequent V-er.

4. Manner and ease of accomplishment.

- 4.1. Manner of V-ing.
 - 4.1.1. To completely or forcefully V.
 - 4.1.2. To V as a group, in a group, collectively.
- 4.2. Speed.

- 4.2.1. To V slowly.
- 4.2.2. To V quickly.
- 4.3. Gradualness/suddenness.
 - 4.3.1. To V gradually.
 - 4.3.2. To V suddenly, in a short time.
- 4.4. To V in a delaying way, casually (mostly with connotations of carelessness or anger).
- 4.5. To V in a strange way.
- 4.6. Ease or difficulty of V-ing.
 - 4.6.1. Ease of V-ing, or to V well.
 - 4.6.2. Difficulty of V-ing.
 - 4.6.2.1. To V wrongly.
 - 4.6.2.2. To V with difficulty over a period of time.
- 5. Comparison.
- 6. To pretend to V/act like V.
- 7. Addresses expectations of speaker or hearer.
 - 7.1. To already V, unexpectedly V.
 - 7.2. To finally V, V at last.
 - 7.3. To luckily V.
- 8. Aspect.
 - 8.1. To V first/early.
 - 8.2. Cessation, accomplishment of V.
 - 8.3. To almost V.
 - 8.4. Continuous V.
 - 8.5. Iterative/frequentative aspectual distinctions.
 - 8.5.1. To V repeatedly.
 - 8.5.2. To V now and then, on and off, back and forth.
 - 8.6. To V customarily.
 - 8.7. To V again, one more time.

B. Class-Free Postbases.

- 1. Quantitative judgment of speaker.
 - 1.1. To V a lot.
 - 1.2. To V a little.
 - 1.3. To only V, just V.
- 2. Qualitative judgment of speaker.
 - 2.1. To V thoroughly vs. not V thoroughly.

- 2.1.1. To V thoroughly.
- 2.1.2. To rather V, kind of V, to V not thoroughly.
- 2.2. To V abnormally, crudely, wrongly.
- 2.3. For good/big old one to V.
- 2.4. To V in the original or traditional style vs. in a new way.
 - 2.4.1. To V in the original way, to V really, precisely, exactly.
 - 2.4.2. To V in a new, fancy way, to V as an improvement.
- 3. Degree of confidence of the speaker.
 - 3.1. To seem to V.
 - 3.2. To truly V.

C. NEG Postbases.

D. AUX Postbases.

- 1. Modality.
 - 1.1. Ability.
 - 1.2. Prospective.
 - 1.3. To need to V.
 - 1.4. Irrealis.
- 2. Past Tense.
- 3. Progressive Aspect.
- 4. Future/Frustrative.
 - 4.1. Future Tense.
 - 4.2. Frustrative.
- 5. Evidential/Imputative.
 - 5.1. Evidential.
 - 5.2. Imputative (compound-verbal).

2.5.3. A Classified List of Productive CSY VV Postbases

A. PreAUX Postbases.

- 1. Voice.
 - 1.1. Detransitivizing and "half-transitive."
 +i- 'to V something'; used with nonagentive and transitive-only verb bases and with intransitive endings; also seems to have a vestigial "sufferer" use (p.) (BAB-273; MI-215).
 - 1.2. Transitive and transitive.

1.2.1. Causatives.

1.2.1.1. Causatives (not compound-verbal postbases).

-ngllagh- 'to endeavor to induce one to V' (also NV) (p.) (BAb)

+sagh- 'to cause one to V or be V-ed' (p.) (BAb)

+sigh- 'to wait for (it) to V; to cause (it) to V' (p.) (BAb)

+sighagh- 'to cause it to V (specialized meaning)' (n.p.). Example:

ayugesighagh- 'to mimic'.

Cf. *ayuge-* 'to be a certain way, to resemble' (BAb-52)

1.2.1.2. Causatives (compound-verbal postbases).

@+miqu- 'to compel to V, to make V' (*tem > m* after a fricative) (BAb)

+(te)snanigh- 'to tell not to V; to forbid one to V' (p.) (BAb)

@+nanighqe- 'to make one cease to V' (*ten > nn*) (p.). Only two examples in my data (53-44; BAb-171) (also a NEG postbase, classifiable under C).

+(te)snaanghit^oe- 'to tell not to V in the future; to forbid one to V in the future' (p.)

+saghagh- 'to try to induce to V' (p.) (BAb)

+seghagh- 'to try to induce to V'; nonproductive variant of +saghagh- found in *alingseghagh-* 'to try to scare, to purposely frighten (often with the implication of "teaching a lesson")'

Cf. *alinge-* 'to be afraid' (BAb-26)

@-neghsigh- 'to wait for (it) to V; to wait for (it) to be or become V' (*ten > nn*) (p.)

:sqe- 'to want or ask one to V'; if uvular dropping occurs with this postbase, the result is always *ii* and never *uu* or *aa* (p.) (BAb)

+(te)ste- 'to cause one to V; to allow one to V; to make one V; to let one V; to have one V' (*te* is used with consonant-ending bases) (p.); 'after V'; only with APO. This postbase is used here in a formal sense in order to satisfy the requirement that the subject of an APO verb be coreferential with the subject of the superordinate verb; the corresponding productive negative sequence

+(te)ste-gpe- has the predictable opposite meaning and is a much more common way than the PRO mood to express 'before V' (BAb)

+(te)stepag- 'to cause one to V too much; to allow one to V too much' (te is used with consonant-ending bases) (p.)

1.2.2. Comitatives.

There seems to be no difference in meaning between the three following postbases; there might be dialectal differences, since only -lgutke- is attested on SLI.

-lgusigh- 'to V together with someone (comitative), to help someone V'

(marginally p.?). All examples are from the SFE:

esghapalgusigh- 'to watch together with' (EMa-81, 82)

Cf. esghapag- 'to watch, to look at' (BAb-58)

qaakilgusigh- 'to help lift something (onto a sled)' (EMa-82)

Cf. qaake- 'to put something up on an elevated place (as on a shelf)'

(BAb-169)

qalmeghsalgusigh- 'to help clean, make shine something (as a knife)'

(EMa-82)

Cf. qelmeghsagh- 'to polish' (BAb-181)

qiyalgusigh- 'to cry, sharing someone's grief' (EMa-81)

Cf. qiya- 'to cry' (BAb-190)

-lgute- 'to V together with someone (comitative), to help someone V' (marginally p.?) Example is from the SFE:

ivaghilgute- 'to help someone search' (EMa-81)

Cf. ivaghi- 'to search for something' (BAb-84)

-lgutke- 'to V together with someone (comitative), to help someone V' (marginally p.?). The only form so far found both on SLI and in the SFE. This form might be productive and morphologically predictable from a VN postbase -lgute- 'one with a partner in V-ing' (related to the NN -lgute- 'one with the same N' [BAb-281]) and the NV postbase -ke- 'to have as one's N' (BAb-277); however, only one occurrence of the VN -lgute- has been found: igleghalgute- 'traveling companion' (BAb-72), and it is probably a nonproductive VV. Examples:

aleghqulgutke- 'to speak with' (Em-81, 82)

Cf. aleghqugh- 'to speak, to tell, to converse, to advise' (BAb-25)

igleghalgutke- 'to go by conveyance with' (Em-81)

Cf. iglegha- 'to be traveling' (BAb-72)

naghaalgutke- 'to play together with' (Em-81, 95)

Cf. naghaagh- 'to play' (BAb-121)

qavalgutke- 'to sleep with' (NBK/5-67)

Cf. *qavagh-* 'to sleep, to fall asleep' (BAb-177)

qepghalutke- 'to work together, as partners' (NBK/9-65)

Cf. *qepghagh-* 'to work' (BAb-183)

1.2.3. Instrumental.

@+*natke-* 'to use in order to V' (p.); possibly only with the TRP mood

1.2.4. Deriving actives from statives.

+*sugh-* 'to test how V (it) is; to check how V (it) is' (p.) (BAb)

1.2.5. Other transitivity or transitive.

:(u)*te-* 'to V for, to V with; to V each other' (p.) (BAb)

:(u)*tke-* 'to V on account of it' (p.) (BAb)

@+*vike-* 'to have as a place, site, time, or object of one's V-ing' (*tev > f*) (p.) (BAb)

2. Derivation of adjectival or emotional verbs.

2.1. With adjectival verbs.

2.1.1. To be or become V to a certain degree.

+*kaligh-* 'to become approximately that V'; with adjectival verbs (n.p.). Example:

angkaligh- 'to become approximately that size' (NBK/1-77)

Cf. *aange-* 'to be big' (BAb-36)

+*tutka-* 'to be V to an indicated degree'; with adjectival verbs, and emotional verbs with the VV+*nagh-* (p.) (BAb) (also NV)

+*tutkaligh-* 'to be V to a not precisely known amount'; with adjectival and emotional verbs with the VV+*nagh-* (p.)

-*rkaggau-* 'to be V to a small extent (?)' (p.); from the VN postbase -*rkaggagh**- 'little V-er'. Example:

nenglarkaggau- 'to be funny to a small extent' (AN-38)

Cf. *nenglaghnagh-* 'to be funny' (BAb-133)

-*rkapigu-* 'to be very V (?)' (p.). Examples:

iperkapigu- 'to be very sharp' (SLC-84)

Cf. *ipeg-* 'to be sharp' (BAb-80)

pinirkapigu- 'to be very good' (NBK/6-6; RU-235)

Cf. *pinigh-* 'to be good; to be satisfying' (BAb-160)

2.1.2. To be in a state of V.

@+*nga-* 'to be in state of V or of having V-ed' (*te > ø* after fricative) (p.) (BAb); also with postural roots

2.1.3. To reach a state of V.

+*yagute-* 'to reach a state of V-ing' (p.) (BAb); also with emotional roots

2.1.4. To pretend to be V. (See also A. 6)

+yugte- 'to pretend to be V; to act like V (which one is not)' (marginally productive); occurs with adjectival verbs, ending with the NV postbase :(*nglu-* 'to be N')

2.2. With emotional verbs in particular.

2.2.1. Intransitive.

@+nagh- 'to cause V-ing (BAb); to be V-able, to be potentially V-ing or V-ed' (*ten > nn*) (also VN: 'a V-able thing, a potentially V-ed or V-ing thing'; also NN: 'something that causes V-ing' [BAb-287]; also NV: 'to be a potential N') (marginally productive); occurs with emotional verbs and with some adjectival verbs; also with almost all emotional roots

@+naqnagh- 'to cause to tend to V, to cause to feel V' (marginally productive ?); with emotional verbs only (?). Examples:

nallunaqnagh- 'to defy knowledge' (NBK/10-21)

Cf. *nallu-* 'to be ignorant (due to immaturity)' (BAb-124)

+yug- 'to feel like V, V-able, to want to V' (marginally productive); occurs with verbs of emotion and a few other and with all emotional roots; see also **+yug-** (A. 3.2.2.)

2.2.2. Transitive.

-ke- 'to feel V toward, to V toward, to find V-able' (BAb); (marginally productive); occurs with all emotional verbs and with almost all emotional roots

+yuke- 'to feel like V with, to want to V' (n.p.; equivalent of **-ke-** for some verbs of emotion, also with some other verbs); also with some emotional roots; see also **+yuke-** (D. 5.2). Examples:

ineqsuke- 'to find attractive (especially a baby)'

Cf. *iinqe-* 'to coo to a child, to say the customary made-up words, nonsense phrases, etc., used for that particular child to that child' (BAb-78)

liisuke- 'to want to learn' (HEN-4; NBK/6-49)

Cf. *liite-* 'to learn' (BAb-106)

nalluyuke- 'to doubt'

Cf. *nalluke-* 'to not know'; *nallu-* 'to be ignorant (due to immaturity)' (BAb-124)

nenglaghyuke- 'to laugh at' (NBK/1-54)

Cf. *nenglagh-* 'to laugh' (BAb-133)

piyuke- 'to like, to want' (HEN-6, 7, 10, 12, 13; NBK/6-51; NBK/8-70, 78; BAb-13)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

qiliighyuke- 'to covet'

Cf. *qiliigh-* 'to covet' (BAb-187)

usuqsuke- 'to be impressed with'

Cf. *usuqe-* 'to praise' (BAb-251)

2.2.3. To habitually be V. (See also A. 8.6)

+tagh- 'to habitually V (specialized meaning), by nature or disposition, keep V-ing' (marginally productive); occurs with all emotional verbs and with some others; also with some emotional roots: 'to tend to V', and some postural roots: 'to V back and forth or on and off' (also NV) (BAb). Example: *agitaghatagh-* 'to keep yawning'

Cf. *agitagha-* 'to yawn' (BAb-19)

alingnaghtagh- 'to have shamanistic powers' (NBK/8-74; BAb-26)

Cf. *alingnagh-* 'to be frightening' (BAb-26)

alingtagh- 'to be cowardly; to be habitually fearful; to be unduly cautious' (BAb-27, 300)

Cf. *alinge-* 'to be afraid; to be scared' (BAb-26)

amugtagh- 'to have trouble seeing'

Cf. *amug-* 'to be unable to see' (BAb-33)

ighsanitagh- 'to be lazy'

Cf. *ighsani-* 'to refuse to do as told out of laziness' (BAb-70)

ighsatagh- 'to be haughty; to be noted for one's habit of refusing requests'

Cf. *ighsa-* 'to refuse' (BAb-70)

nangyaghtagh- 'to be always fearful'

Cf. *nangyagh-* 'to wince, to hesitate, to fear heights' (BAb-126)

puygutagh- 'to be forgetful' (BAb-167)

Cf. *puygu-* 'to forget' (BAb-166)

ullghitaghtagh- 'to keep rolling'

Cf. *ullghitagh-* 'to roll' (BAb-244)

-ketagh- 'to habitually tend by one's disposition to V' (marginally productive); occurs with all emotional verbs and with some emotional roots (also VN) (BAb)

3. To go and V, try and V, want to V, become a V-er.

3.1. To go and V/miss the event of V.

3.1.2. To go and V.

+yagh- 'to go somewhere in order to V' (BAb) (marginally productive; only with verbs denoting specialized activities; *+yaghtugh-* is the totally productive correspondent) (also NV: 'to hunt N', and also with English or Russian

loanwords: 'to go to N (place of specialized activity)'. Examples of the NV with loanwords are:

Kuusmeyagh- 'to go somewhere for Christmas' (NBK/7-24)

Cf. *Kuusme-* 'Christmas' (HEN-20; NBK/7-24, 34; NBK/10-40)

kino-yagh- (SFE), *movie-yagh-* (SLI) 'to go to the movies' (VA-155; BAb-26; SI-79)

Santiyagh- 'to go to the Sunday (religious) service' (NBK/1-22; BAb-206)

Cf. *Santi-* 'Sunday, to be Sunday' (NBK/5-66; BAb-206)

+yaghtugh- 'to be about to V, to go somewhere to V' (p.) (BAb); 'to be almost V-ed (verbs of movement)'

+yaghtuqagh- 'to briefly go somewhere to V' (p.); can convey politeness, especially with the OPT mood

3.1.3. To miss the event of V.

-tghute- 'to miss the event of V; to pass up the opportunity of V (?)' (p.?: only found so far after the postbases *+yagh-* and *+yaghtugh-* 'to go to V') (also NV: 'to miss the mark by shooting too much toward N'; used on Demonstrative Adverbs and Positional bases [BAb-302])

3.2. To try and V/want to V.

3.2.1. To attempt to V/try to V.

@+naqe- 'to try to V' (BAb) (*ten > nn*) (p.); see also **@+naqe-** (D. 1.2)

@+naqute- 'to try to V' (*ten > nn*) (p.)

@+naqutke- 'to try to V' (BAb) (*ten > nn*) (p.)

The difference between **@+naqe-**, **@+naqute-**, and **@+naqutke-** is not clear; **@+naqe-** can occur with both intransitives and transitives; since **@+naqute-** and **@+naqutke-** both etymologically contain transitivizing postbases [:(u)te- and :(u)tke-], one would expect them to occur with transitive verbs only. **@+naqute-** is a form found in Rubtsova's dictionary (RUa-638, 643), and occurs only once in my SLI data (cf. NBK/9-44 below); it is found with transitives only (unless, of course, detransitivizing *+i-* follows); **@+naqutke-** is more common than **@+naqute-** on SLI, occurring both in Gambell and Savoonga; it occurs with transitives only in the SFE (unless, of course, detransitivizing *+i-* follows), and is also commonest with transitives on SLI; however, examples with intransitives also occur in my data (NBK/9-11; NBK/10-13; BAb-288); **@+naqute-** and **@+naqutke-** can occur with the same base, as shown in

naallghunnaqute- (NBK/9-44), *naallghunnaqutke-* (NBK/8-78) 'to try to fix, heal, correct'

naallghunnaqute- (NBK/9-44), *naallghunnaqutke-* (NBK/8-78) 'to try to fix, heal, correct'

Cf. *naallghute-* 'to fix; to repair; to correct' (BAb-124)

3.2.2. To want to V.

+yug- 'to want to V' (p.) (BAb) (also as a marginally productive NV: 'to want N, to desire N (instruments or utensils, items of clothing, drinks, and food)'; see also **+yug-** (A. 2.2.1))

+yukagh- 'to be ready to V; to be going to or want to V at any moment' (p.)

3.3. To become a V-er.

3.3.1. To be time to V.

+yaghqaaghte- 'to become necessary to V (mild obligation caused by circumstances); to be time for S to V'; intransitive only (p.)

3.3.2. To become able to V/learn to V.

-kayugughte- 'to become able to V, to become a V-er' (p.)

-kayugunaqe- 'to learn to V' (p.); attested in data from the SFE only

+yaaghte- 'to learn to V' (p.) (BAb)

3.3.3. To become a big/frequent V-er.

-ghllagughte- 'to become a big/frequent V-er' (p.); can be used with transitive inflections

@-nghiighte- 'to V to a large extent, in a big way' (*ten > nn*) (p.) (BAb); not found in my data

4. Manner and ease of accomplishment.

4.1. Manner of V-ing.

4.1.1. To completely or forcefully V.

@+qugh- 'to V all things available, to V completely'; used only with *te-* ending bases (?) (BAb); also with other bases; in particular: 'to quickly V, to keep on V-ing, to repeatedly V, to V for a long time' (*te > ø*) (n.p.?)

@+qughtagh- 'to V all things available, to V completely'; used only with *te-* ending bases (?) (*te > ø*) (n.p.?). Examples:

malighqughtagh- 'to run out after' (SLb-2)

Cf. *maligte-* 'to accompany; to go with; to follow with the permission of those being followed'; *malighqugh-* 'to chase' (BAb-109)

qawaaghqughtagh- 'to catch a lot of ducks' (UL-118)

Cf. *qawaagte-* 'to catch birds' (BAb-301)

+ugh- 'to V completely' (n.p.?) (BAb); in particular: 'to keep on or continue V-ing with some thoroughness or force; to repeatedly V; to V all things available; one by one' (specialized activities)

:ughagh- 'to V repeatedly or continuously, with some thoroughness or force'

(n.p.). Examples:

alingughagh- 'to wince; to flinch' (BAb-27)

Cf. *alinge-* 'to be afraid; to be scared' (BAb-26)

avuughagh- 'to divide quickly'

Cf. *avugh-* 'to sort' (BAb-48)

sapughagh- 'to repeatedly and continuously cover'

Cf. *saape-* 'to cover' (BAb-206)

+ughtagh- 'to V all things available, to V completely' (n.p.?). Examples:

neghughtagh- 'to eat all of it' (transitive) (UL-118)

Cf. *negh(e)-* 'to eat' (BAb-131)

uguqughtagh- 'to be much burned' (UL-118)

Cf. *uguqe-* 'to burn one's flesh' (BAb-241)

unangughtagh- 'to catch a great deal (hunting)' (UL-118)

Cf. *unange-* 'to catch a seal (or other animal)' (BAb-246)

4.1.2. To V as a group, in a group, collectively.

+(t)uute- 'to V together, as a group, indicating single as opposed to distributional

movement'; *+tuute-* is used with consonant-ending bases (p.) (BAb)

(possibly related to NV *+uute-* 'to make the N sound' (BAb-304))

@+quute- 'to V together, as a group, indicating single as opposed to distributional

movement' (p.). The distribution of the two forms above is probably the

same as for *+ugh-* and *@+qugh-*; *@+quute-* occurs after bases ending in

te-, and *+(t)uute-* occurs elsewhere (*te > ø*). The *t* of *te-* is apparently not

deleted when it is part of the stem morpheme and when *te-* is not preceded

by a consonant. Example where *te-* is not part of the stem morpheme:

pellghuquute- 'to separate shares for someone' (JAA-213)

Cf. *pellghute-* 'to part from each other; to divorce; to put aside for',

pellegh- 'to break or fall apart, to separate or divide things, to go in separate ways' (BAb-155)

Example where *te-* is part of the stem morpheme:

kaatquute- 'to arrive as a group, to all arrive' (NBK/1-76; NBK/6-5, 7; SI-

61)

Cf. *kaate-* 'to arrive' (BAb-92)

+aate- 'to V together, as one group, indicating single as opposed to distributional

movement (?)' (n.p.?). Examples:

ateghaate- 'to go down as a group'

Cf. *ategh-* 'to go down; to get down off of something' (BAb-45)

iighaate- 'to play hide and seek'

Cf. *itegh-* 'to go in; to enter' (BAb-83)

mayughaate- 'to climb up as a group' (RU-257; RUa-595)

Cf. *mayugh-* 'to go up; to ascend; to climb' (BAb-114)

miluqataate- 'to throw as a group' (RU-257)

Cf. *milugh-* 'to throw' (BAb-118)

qetgeghaate- 'to jump together' (SEP-11)

Cf. *qetgegh-* 'to jump' (BAb-186)

4.2. Speed.

4.2.1. To V slowly.

-kestagh- 'to V ahead of time; to V patiently; to V slowly; to V peacefully; to V leisurely' (BAb); also 'to start V-ing (for seasons and atmospheric phenomena)' (p.)

4.2.2. To V quickly.

@-ragkiigh- 'to V quickly' (*ter > rr*) (p.) (BAb)

@-ragkiighute- 'to V quickly' (*ter > rr*) (p.?): the difference in meaning with the preceding postbase is unclear; it is clear that this form does not contain the productive transitivizing postbase *:(ute-*, since this postbase can appear immediately before it, and since it can be used with intransitive as well as transitive verbs. Examples:

igaarragkiighute- 'to write to him/her fast' (MV-181)

Cf. *igaate-* 'to write to him/her' (BAb-67)

piluguragkiighute- 'to put on clothes fast' (NBK/9-12)

Cf. *pilugug-* 'to put on clothes' (BAb-159)

saghnaragkiighute- 'to gather fast' (SLb-5)

Cf. *saghna-* 'to gather, pick up, collect' (BAb-201)

sukarragkiighute- 'to run fast (as in a race)' (SI-65)

Cf. *sukate-* 'to go fast' (BAb-216)

-rakegte- 'to V quickly' (p.?): also with some positional roots. Examples:

nerakegte- 'to eat quickly' (NBK/10-34)

Cf. *negh(e)-* 'to eat' (BAb-131)

qimugsirakegte- 'to drive a dogteam fast' (RUa-616)

Cf. *qimugsigh-* 'to go via dogteam' (BAb-187)

tagirakegte- 'to come fast' (RUa-606)

Cf. *tagi-* 'to come (to speaker)' (BAb-219)

-rakguugh- 'to be quick, swift at V-ing; to learn to V quickly' (p.?). Examples:

qepgharakguugh- 'to work fast' (RUa-606)

Cf. *qepghagh-* 'to work' (BAb-183)

qimugsirakguugh- 'to learn to drive a dogteam fast' (RUa-615)

Cf. *qimugsigh-* 'to go via dogteam' (BAb-187)

-rakguughqu- 'to become quick, swift at V-ing' (p.?)

qepgharakguughqu- 'to become a fast worker' (NBK/3-45)

Cf. *qepghagh-* 'to work' (BAb-183)

4.3. Gradualness/suddenness.

4.3.1. To V gradually.

+raag- 'to do some V-ing' (BAb); also 'to kind of, but not exactly, V' (p.)

-ghraag- 'to gradually V, to get V-er' (marginally productive?); also n.p. NV 'to be somewhat N'. Examples:

aastughraag- 'to get wider, wider than before'

Cf. *aastu-* 'to be wide' (NBK/1-9; BAb-44)

ighivgaghraag- 'for the twilight to gradually approach' (RUa-596)

Cf. *ighivgagh-* 'for the night to fall' (RUa-146)

iqalluteghraag- 'to gradually get a lot of fish'

Cf. *iqallute-* 'to catch fish' (HEN-18)

kiiveghraag- 'to abate, to gradually disappear'

Cf. *kiive-* 'to settle (such as food in stomach, child after crying, tub draining, sediment sinking)' (BAb-100)

-ghraagte- 'to be somewhat V-er, to be partly V'; with adjectival verbs (marginally p.). Examples:

mamlegraagte- 'to be partly dark'

Cf. *mamleg-* 'to be dark' (BAb-110)

pinighraagte- 'to be somewhat better' (SI-70)

Cf. *pinigh-* 'to be good; to be satisfying' (BAb-160)

4.3.2. To V suddenly, in a short time.

+aghte- 'to suddenly V, or for a short time, also attenuating polite request' (p.) (BAb); often with OPT mood.

+aghaghte- 'to immediately V; to V with short duration of action' (p.). Examples:

esleqaghaghte- 'to be filled immediately' (HEN-19; SI-63)

Cf. *esleqe-* 'to be full' (BAb-59)

estaaghaghte- 'to slide in a short time' (SLb-8, 19)

Cf. *estu-* 'to slide' (BAb-60)

maniighaghte- 'to suddenly run to for protection' (BAb-112)

Cf. *mani-* 'to move close to' (BAb-112)

piighaghte- 'to go quickly; to say quickly; to act quickly' (SLb-4, 10; BAb-158)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

quyaaghaghte- 'to be immediately happy' (SLb-10)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

quyaaghaghte- 'to be immediately happy' (SLb-10)

Cf. *quya-* 'to be happy; to be joyous' (BAb-196)

tagiighaghte- 'to come straight back' (HEN-22)

Cf. *tagi-* 'to come (to speaker)' (BAb-219)

ulevaghaghte- 'to have filled immediately' (NBK/2-5)

Cf. *uleve-* 'to flood; to overflow' (BAb-243)

yaghaghaghte- 'to become disjointed by being bent too far in the wrong direction (of person or animal or its limb)' (BAb-261); derivation uncertain

-qagh- 'briefly V; to V for a short while' (productive only in the SFE?; on SLI it appears that this postbase forms lexicalized combinations with stems or following or preceding postbases); 'please V'; only with OPT (p.) (BAb)

-qaghaqe- 'to V intermittently; to V now and then'; only with APO (p.) (BAb)

-qaghnaqe- 'to be about to V for a moment' (p.)

+qaghute-, **+aghute-** 'as soon as V, when V'; in the Soviet literature only (p.); probably the etymological equivalent of the Contemporative 3 of CAY (JAb-605, 611). From what I understand of the unclear discussion and charts in MEc-154-58, it appears that the intransitive of this type of mood has a form **+aghute-** immediately followed by person endings that are identical to AB endings with a singular possessee; the (1-3) transitive is formed with **+qaghute-** immediately followed by AB person endings; the other transitive forms are formed with **+qaghute-**, followed by the CQO mood marker, followed by RL oblique personal endings for the 2nd and 3rd person subject and the (1-2) form, and followed by LC oblique personal endings for the 3R subject forms. 3R object forms are not given. This unlikely pattern will need to be checked and clarified with native speakers.

-qaghte- 'to suddenly V'; not used with bases ending in *g* or a prime vowel (?) (p.) (BAb); also 'to V right away'; occasionally spelled as **-qeghte-**

-mqaghte- 'to suddenly V' (n.p.). Example:

kangsumqaghte- 'to get stuck trying to go through an opening'

Cf. *kangsugh-* 'to be too large to fit into an opening' (BAb-90)

+tuqagh- 'to V for a (short) while' (p.)

4.4. To V in a delaying way, casually (mostly with connotations of carelessness or anger).

-msug- 'to casually, nonchalantly V' (p.) (BAb); also NV 'to move with tip of N' (n.p.) (BAb-166)

-vyugte- 'to V sloppily, in a rough way' (n.p.). Example:

-ngsi- 'to casually V' (n.p.?) (BAb)

-kusiigh- 'to casually, slowly V' (p.) (BAb)

-lqusiigh- 'to V angrily' (p.). Example:

akuzilqusiigh- 'to make sharp, caustic remarks' (RUa-46)

Cf. *akuzi-* 'to speak' (BAb-24)

@+naqelqusiigh- 'to delay or stall at V-ing' (*ten > nn*) (p.) (BAb)

-nasiigh- 'to put off V-ing, to stall at V-ing, to V angrily' (p.) (BAb)

4.5. To V in a strange way.

-saag-, -yaag- 'to V in a strange way, to V weirdly' (p.) (BAb)

4.6. Ease or difficulty of V-ing.

4.6.1. Ease of V-ing, or to V well.

-llgu- 'to V well' (p.) (BAb)

+nipigte- 'to really be good to V' (marginally productive?) (also NV)

-nqegte- 'to V easily, to V readily' (p.) (BAb); there might be a related *+qegte-* 'to V repeatedly' attested only once, and in the SFE literature (MEc-49)

-nqegsagh- 'to V completely, correctly, thoroughly', productive; as shown in SFE sources (MEc-61-62). For SLI, I only have two possibly lexicalized forms containing this postbase:

qenneqegsagh- 'to embrace, hug or squeeze hard; to make a hard fist'

Cf. *qete-* 'to embrace; to hug; to squeeze' (BAb-184)

ulimanqegsagh- 'to redo correctly'

Cf. *ulima-* 'to make' (BAb-243)

-nqegsi- 'to be good with respect to V-ing' (n.p.). Example:

yugunqegsi- 'to be healthy'

Cf. *yugu-* 'to be a person'

+yaaghagh- 'to easily somewhat V' (n.p.?). Examples:

liisaaghagh- 'to easily learn a little' (NBK/9-22, 23)

Cf. *liite-* 'to learn' (BAb-106)

qeneghsaaghagh-, *qeneghyaaghagh-* 'to feel somewhat slighted' (JAa-254)

Cf. *qeneghte-*, *qenegh-* 'to feel and say that one has been slighted' (BAb-182)

temsiyaaghagh- 'to smile faintly wanting to laugh but suppressing it'

Cf. CAY *temci-* 'find funny' (JAb-367)

temsiyaaghagh- 'to smile faintly wanting to laugh but suppressing it'

Cf. CAY *temci-* 'find funny' (JAb-367)

-yu- 'to be good at V-ing' (p.) (also VN) (BAb)

+yugnagh- 'to be easy to V' (BAb); also 'to make one feel V' (p.)

+yuguma- 'to be easy to V' (p.) (BAb); with nonagentive verbs only; the nonlexicalized sequence of *+yug-* (see A. 3.2.2) and *@:(i/u)ma-* (see D. 2) is also common.

4.6.2. Difficulty of V-ing.

4.6.2.1. To V wrongly.

@-neghllug- 'to V wrongly or with difficulty' (*ten > nn*) (n.p.?); also VN (p.).

Examples:

pineghllug- 'to be obstinate; to be stubborn; to be heedless' (BAb-159)

Cf. *pi-* 'to do; to say; to act; to go' (BAb-157)

tusaqneghllug- 'to misunderstand; to hear incorrectly'

Cf. *tusaq-* 'to hear and comprehend' (BAb-236)

@-neghllugte- 'to V wrongly or with difficulty' (*ten > nn*) (n.p.). Example:

taghtughneghllugte- 'to wake up with difficulty' (RUa-499)

Cf. *teghtugh-* 'to wake up' (BAb-227)

@-neghllugu- 'to be V wrongly or with difficulty' (*ten > nn*) (p.). Example:

liinneghllugu- 'to be unable to learn' (HEN-10)

Cf. *liite-* 'to learn' (BAb-106)

4.6.2.2. To V with difficulty over a period of time.

--iqe- 'to V in a defective way over a period of time' (n.p.); also NV (n.p.); when

with nouns in *-negh-*: 'to be N' (with unfavorable connotations); when with body part nouns: 'to have an N-ache'; with a few other nouns: 'to V with N' (specialized meanings, often, but not always, with unfavorable connotations). Examples:

iqlengiqe- 'to lie'

Cf. *iqlengagh-* 'to be a liar' (BAb-81)

iyatiqe- 'to be starving' (JAa-109)

Cf. *iyatagh-* 'to be hungry' (BAb-68)

qaviqe- 'to sleep on (when one should not anymore)' (SLb-15)

Cf. *qavagh-* 'to sleep; to fall asleep' (BAb-177)

qiyiqe- 'to cry on and off over a period of time'

Cf. *qiya-* 'to cry' (BAb-190)

Cf. *ighu-* 'leg' (BAb-71); through **ighelleghyagh-*?

qetlliqe- 'to be angry; to be furious' (BAb-180)

Cf. CAY *qevte-* 'to be angry or frustrated' (JAb-330)

sagiqe- 'to persist; to persevere; to insist; to urge others on' (BAb-202);
derivation uncertain.

yeghyiqe- (also *yeghyake-*) 'to feel an aversion to certain foods' (BAb-262); derivation uncertain

+lliqe- 'to repeatedly or chronically have trouble V-ing' (BAb) (marginally productive?) (also NV)

-llgilliqe- 'to experience trouble in V-ing' (p.) (BAb)

@-neghlliqe- 'to repeatedly have trouble V-ing, be hard to V' (*te > ø*); given as *-neghlliqe-* in RUa-603. Probably productive, but note the unexpected morphophonemics:

ineghneghlliqe- 'to be disobedient'

Cf. *ineghte-* 'to admonish; to warn; to alert; to forbid; to tell not to do something' (BAb-78)

pineghlliqe- 'to be obstinate; to be stubborn; to be heedless' (BAb-159)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

-yiilliqe- 'to V poorly, to have trouble V-ing' (p.)

5. Comparison.

+atagh- 'to V more, some more, to be V-er (with adjectival verbs)' (n.p.); this might be a performance error for *+ataghagh-*, since it was found only once, and the same stem also occurs with *+ataghagh-*. Example:
uglaghatagh- (BAb-146) or *uglaghataghagh-* (NBK/5-59; BAb-178) 'to be more numerous'

Cf. *uglagh-* 'to be many; to be numerous; to be much' (BAb-240)

+ataghagh- 'to V more, some more, to be V-er' (mainly with adjectival verbs), rather than BAb's 'to be a little V, to be somewhat V' (p.); spelled *+ataaghagh-* in SI, when rhythmic lengthening is expected. There are also two NV examples with a noun base referring to wind:
anuqataghagh- (BAb-173, 203), *anuqataghaghte-* (BAb-39) 'to pick up (wind)'

Cf. *anuqe-* 'wind' (BAb-39)

quutlaghataghaghaaghte- 'for a breeze to start blowing from the east (?)' (JAa-274)

Cf. *quutlagh-* (N) 'northeast' (BAb-196)

quutfaghataghaghaaghte- 'for a breeze to start blowing from the east (?)'
(JAa-274)

Cf. *quutfagh-* (N) 'northeast' (BAb-196)

This postbase has the allomorph *+aghagh-* in two cases: after a base-final *te-*, probably by a process of haplology (...*tataghagh-* > ...*taghagh-*);
aghtaghagh- 'to become light' (RUa-608; BAb-16)

Cf. *aghte-* 'to dawn, for day to break' (BAb-16)

akingitaghagh- 'to be cheaper' (HEN-10)

Cf. *akingit^oe-* 'to be cheap; to be free; to be inexpensive' (BAb-21)

mekitaghagh- 'to be somewhat smaller' (BAb-114); probably from an
unattested base **mekite-*, probably the same as CAY *miket^oe-* 'to
be little, small in size' (JAB-236)

nighugtaghagh- 'to become light' (NBK/6-23)

Cf. *nighugte-* 'to become bright' (BAb-137)

sukangiitaghagh- 'to drive slower' (NBK/4-59; HEN-16)

Cf. *sukangiite-* 'to slow down' (BAb-216)

sukataghagh- 'to be or go faster' (NBK/4-59)

Cf. *sukate-* 'to go fast' (BAb-216)

After the postbase *%(gh/l)i-* 'to become V' (BAb-376):

aghqelliighagh- 'to become shallow (as a lake)'

Cf. *aghqelli-* 'to lower; to make lower; to become shallow' (BAb-15)

mekelliighagh- 'to make smaller' (NBK/5-33)

Cf. *mekelli-* 'to become smaller; to make smaller; to alter in sewing'
(BAb-114)

takelliighagh- 'to get shorter'

Cf. *takelli-* 'to shorten' (BAb-221)

uniilliighagh- 'to become soft, pliable'

Cf. *uniigh-* 'to become limp; to lose muscle control; to become
paralyzed' (BAb-248)

+aghataghagh- 'to be V-er' (n.p.). Example:

piighataghagh- 'to get better; to improve' (BAb-158)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

-nghu- 'to be V-er' (p.) The CAY cognate of this postbase is well attested, but for
CSY, it is documented only in JA-32.

6. To pretend to V/act like V.

+iiraagh- 'to play at V-ing' (also NV: 'to pretend by using N') (p.) (BAb)

-sighwaagh- 'to pretend to V; to V without putting much effort into it' (p.) (BAb)

Cf. *agigte-* 'to peek over; to look around from a vantage point; to go to a higher point' (BAb-18; SI-10)

unangseghwaaghusigh- (N) 'snare' (SI-116)

Cf. *unange-* 'to catch a seal (or other animal)' (BAb-246)

7. Addresses expectations of speaker or hearer.

7.1. To already V, unexpectedly V.

+laghate- 'to V already'; meaning not clear in my own data, maybe also 'to V as a group', since all my examples are inflected for plural subject (p.).

Examples:

aanlaghate- 'to have gone out already' (MEC-41)

Cf. *aane-* 'to go out(side)' (BAb-34)

estulaghate- 'to have slid down already' (SLb-2)

Cf. *estu-* 'to slide' (BAb-60)

iflalahgate- 'to be lost already' (NBK/6-40 [SFE])

Cf. *ifla-* 'to lose; to get lost' (BAb-67)

sikulaghate- 'to have frozen already' (SI-152)

Cf. *siku-* 'to get covered with ice; to freeze' (BAb-212)

tagilaghate- 'to have come already' (NBK/6-7, 40; MEC-41; SI-27)

Cf. *tagi-* 'to come (to speaker)' (BAb-219)

tuqulaghate- 'to have died already' (NBK/10-24)

Cf. *tuqu-* 'to die' (BAb-236)

@-lghagh- 'to V unexpectedly' (*tel > ll*) (n.p.); if related to the above, one would then expect to have **-lghaate-* [from *-lghagh-* and *:(u)te-?*] instead of *+laghate-*, confirmed both by my data and SLI and SFE written sources.

Example:

waakenghillghaghte- 'to startle, surprise, scare'

Cf. *waak-* 'attentive; aware' (BAb-257)

@-lghaghtugh- 'to V already, unexpectedly, surprisingly' (*tel > ll*) (p.)

@-lghaghtuqagh- 'to briefly V already, unexpectedly, surprisingly' (*tel > ll*) (p.)

7.2. To finally V, V at last.

-msag- 'to finally V, to V at last' (p.); not common, at least on SLI; all occurrences in my data except two (SL-15; BAb-19) are from the SFE (Bogoras 1949:216; MEC-52; MV-178; RUa-602); I assume that the long vowel of *-msaag-* in (BAb-19) is a typo.

-msakagh- 'to finally and briefly V, to briefly V at last' (p.); SFE only?

-katagh 'to finally V despite a feeling that it wouldn't occur, to V at last' (p.?): only one occurrence found (SLc-9)

-msakagh- 'to finally and briefly V, to briefly V at last' (p.); SFE only?

-katagh 'to finally V despite a feeling that it wouldn't occur, to V at last' (p.?); only one occurrence found (SL_E-9)

-kataghagh- 'to finally V despite a feeling that it wouldn't occur, to V at last' (p.) (BAB)

7.3. To luckily V.

+laataqu- 'to luckily have V-ed well' (p.) (BAB)

8. Aspect.

8.1. To V first/early.

+yaghagh- 'to V early' (BAB); 'to V too soon' (p.)

+yuggaagh- 'to V first, to V in the beginning' (spelled like this in BAB, as *+yuwahaagh-* in SI) (p.)

+yuggaaqagh- 'to briefly V first, to briefly V in the beginning' (p.)

8.2. Cessation, accomplishment of V.

@+nanigh- 'to cease V-ing, to quit V-ing (either temporarily or forever)' (*ten >nn*) (p.) (BAB) (also a NEG postbase, classifiable under C)

-pagnanigh- 'to cease V-ing too much, to quit V-ing too much' (p.)

+nigh- 'to cease to V' (n.p.?); SFE only? Example:

qavagh-nigh- 'to cease to sleep' (MEC-219)

Cf. *qavagh-* 'to sleep; to fall asleep' (BAB-177)

8.3. To almost V.

-vzigh- 'to almost V' (p.) (BAB)

8.4. Continuous V.

@+leghagh- 'to V slowly and continuously, in a connected mass (?)'

(*tel >ll*) (n.p.?). The frequent combination of *@+leghagh-* with *:(u)te-*:

@+leghaate- (see A. 1.2.5) is said to be "ingressive aspect" according to MEC-41. Examples:

aanleghagh- 'to seep out; to flow out' (RU-117; BAB-34)

Cf. *aane-* 'to go out(side)' (BAB-34)

siingleghagh- 'to plane wood; to push continuously'

Cf. *siinge-* 'to push; to shove' (BAB-213)

uuglleghagh- 'to come up in a group'

Cf. *uugte-* 'to get up onto something' (BAB-241)

-lqinagh-, -lqiinagh- 'to V for a long time' (p.); both forms are attested

@:(i/u)manginagh- 'to V continuously, all the time, to keep V-ing'; verb bases ending in *te* use *i*, and *te* and *ima* becomes *sima*; verb bases ending in *e* (not preceded by *t*) or in a consonant use *u* (p.)

8.5. Iterative/frequentative aspectual distinctions.

8.5.1. To V repeatedly.

+aghtugh- 'to repeatedly V (specialized meanings)' (marginally productive?).

Examples:

iighaghtugh- 'to hide from enemies'

Cf. *iigh-* 'to hide' (BAb-68)

iniightugh- 'to hang things'

Cf. *ini-* 'to hang to dry' (BAb-79)

payangitaghtugh- 'for Siberians to repeatedly come over' (BAb-155)

Cf. *payangite-* 'for Siberians to visit' (NBK/7-79; BAb-155)

-qaghtugh- 'to repeatedly V (specialized meanings)' (marginally productive?).

Example:

qepqaghtugh- 'to be tied up around and around' (NBK/3-52)

Cf. *qepe-* 'to tie' (BAb-183)

+aatagh- 'to V repeatedly and persistently, several times' (p.)

+aghaataagh- 'to keep V-ing, to repeatedly V' (n.p.). Example:

piighaataagh- 'to keep going to, to keep going out' (NBK/1-11; SI-64)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

+pagaataagh- / +vagaataagh- 'to V frequently or for a long time' (verbs of beating and thrusting only?) (p.?); also NV 'for there to be N all over'; the allomorphs are *+pagaataagh-* after consonants, *+vagaataagh-* after *e*.

Examples:

kaksagpagaataagh- 'to whip, lash' (RUa-194); '(repeatedly and severely?)' (UL117)

Cf. *kaksagte-* 'to whip, lash' (RUa-194); BAb-86 has the dialectal variant *kagsagte-*

ketngigpagaataagh- 'to kick repeatedly with the heel' (RUa-595)

Cf. *ketngig-* 'to kick forward with the bottom of one's heel' (BAb-98)

siingvagaataagh- 'to push, shove (with hand)' (RUa-446); 'to thrust (repeatedly and severely?)' (UL-117)

Cf. *siinge-* 'to push; to shove' (BAb-213)

+ragh- 'to V repeatedly, but unnecessarily or unsuccessfully' (p.) (BAb)

+raagh- 'to V repeatedly, but unnecessarily or unsuccessfully' (n.p.). Example:

pumsugraagh- 'to keep pinching; to pinch repeatedly' (BAb-165)

Cf. *pumsug-* 'to hold between thumb and forefinger, to pinch' (BAb-164)

+regh- '(variant of +ragh-?)' (n.p.). Example:

kenuregh- 'to poke hard with the finger'

Cf. *kenu-* 'to poke; to push with a pointed instrument; to bore; to test ice' (BAb-97)

+gragh- '(variant of +ragh-?)' (n.p.?). Examples:

kaapegragh- 'to tap, rap lightly'

Cf. *kaape-* 'to stab; to poke; to pierce a whale with a harpoon; to inoculate' (BAb-91)

kenugragh- 'to press with knuckles'

Cf. *kenu-* 'to poke; to push with a pointed instrument; to bore; to test ice' (BAb-97)

+tugh- 'to keep on V-ing; to V by repeated actions' (BAb); productive, but mostly with verbs of cutting, hitting, and scraping; occurs in lexicalized combinations with verb stems, with the meaning 'to repeatedly V as a specialized or customary activity'

8.5.2. To V now and then, on and off, back and forth.

+aghtagh- 'to repeatedly V with back and forth movement' (p.?). Examples:

mamlegaghtagh- 'to cast shadows' (SLb-2)

Cf. *mamleg-* 'to be dark' (BAb-110)

pangalgaghtagh- 'to run back and forth' (SLb-18)

Cf. *pangaleg-* 'to run on four legs (of animals)' (BAb-148)

qepghaghtagh- 'to work very busily' (NBK/9-35)

Cf. *qepghagh-* 'to work' (BAb-183)

talughaghtagh- 'to repeatedly move in and out of view'

Cf. *talughte-* 'to move out of view' (BAb-222)

+aghaghtagh- 'to repeatedly V with back and forth movement' (n.p.?). Examples:

piighaghtagh- 'to go in and out' (NBK/1-16)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

uvivaghaghtagh- 'to run around' (NBK/7-11)

Cf. *uzive-* 'to revolve; to go around; to rotate' (BAb-255)

-qaghtagh- 'to continuously V with back and forth or up and down movement' (n.p.?). Examples:

aglungqaghtagh- 'to have chattering teeth'

Cf. *aglug-* (N) 'jaw' (BAb-19), and the NV *-nge-* 'to have N'

aatqaghtagh- (?) 'to go back and forth hastily' (NBK/-67; JAa-53)

Cf. *ategh-* 'to go down; to get down off something' (BAb-45)

nuughqaghtagh- 'to pop up now and then continuously' (?) (UL-117)

Cf. *nuug-* 'to surface (of seals, ducks)' (BAb-138)

tuutqaghtagh- 'to step up and down' (SL-14)

Cf. *tuute-* 'to step on; to put a foot on; to land (airplane); to fall (rain)' (BAb-236)

-qaghtaqaq- 'to continuously V with brief back and forth or up and down movement' (n.p.?). Example:

tuutqaghtaqaq- 'to briefly step up and down' (SL-14)

Cf. *tuute-* 'to step on; to put a foot on; to land (airplane); to fall (rain)' (BAb-236)

-/+qaqu- 'to V intermittently' (n.p.?). Examples:

aliiqaqu- 'to be intermittently visible, for weather to be intermittently clear'

Cf. *aliigh-* 'to appear; for weather to clear up' (BAb-27)

nuukaqu- 'to pop out intermittently (seals)' (SI-126)

Cf. *nuug-* 'to surface (of seals, ducks)' (BAb-138)

quyngiliighqaqu- 'to intermittently cook reindeer meat' (RUa-598)

Cf. *quyngiliigh-* 'to cook reindeer meat' (RUa-277)

-ma- 'to V with interruptions or intervals' (p.?); SFE only (MEc-44, 45)

8.6. To V customarily.

@+niigh- 'to carry out the habitual process of V-ing' (specialized activity, especially fishing, hunting, trapping, fighting) (*ten > nn*) (marginally productive?) (also NV: 'to hunt for N; to search for N; to ask for N; to work with N' [BAb]). Examples:

anagniigh- 'to be in the process of fleeing or escaping; to be on the run'

Cf. *anag-* 'to flee; to escape' (BAb-33)

guunniigh- 'to shoot at game; to pick a fight with'

Cf. *guute-* 'to shoot' (BAb-65)

mughunniigh- 'to go hunting'

Cf. *mughute-* 'to hunt on ice' (BAb-119)

naapniigh- 'to go trapping'

Cf. *naapte-* 'to catch with trap or net' (BAb-127)

nusugniigh- 'to snare; to trap'

Cf. *nusug-* 'to pull out' (BAb-141)

tuguniigh- 'to handle roughly; to grapple with; to act so as to kill (of a shaman)'

Cf. *tugu-* 'to take with the hand; to grab; to pick up; to take a wife' (BAb-232)

unangniigh- 'to hunt seals or other sea mammals'

Cf. *unange-* 'to catch a seal (or other animal)' (BAb-246)

+tu- 'to V habitually, or to be usually V' (p.) (also NV) (BAb)

-neghtu- 'to habitually, frequently V' (p.)

:(ng)u- 'to be V-ing; to be V-ing as an occupation or habitually'; mostly with adjectival and emotional verbs. It is possible that this usage of what is formally the productive NV postbase *:(ng)u-* 'to be N' arose under the influence of the English progressive construction 'to be V-ing', since almost all the examples are from texts translated from English; no examples were found in texts from the SFE (n.p.?); 'while in the process of V-ing'; only with APO (p.). Examples (not selecting an APO mood):

igaghyau- 'to be a student' (NBK/6-48, 50; NBK/10-41)

Cf. *igaghyagh-* 'to go to school' (BAb-67)

kiyaghtengngu- 'to be living' (NBK/9-63)

Cf. *kiyaghte-* 'to be; to reside; to live' (BAb-101)

liigikiyugu- 'to be habitually curious' (HEN-4)

Cf. *liigike-* 'to recognize; to sense; to understand' (BAb-106), with lexicalized *+i-* and *+yug-*

qavaghningu- 'to be sleepy' (NBK/4-62; BAb-154)

Cf. *qavaghni-* 'to be sleepy' (BAb-177)

qavau- 'to be sleeping' (NBK/4-36, 51, 63; NBK/6-5; SLb-7)

Cf. *qavagh-* 'to sleep, to fall asleep' (BAb-177)

yimiyugu- 'to habitually feel shy' (HEN-6)

Cf. *yimiyug-* 'to be shy, cowering' (BAb-263)

8.7. To V again, one more time.

@+laatagh- 'to V again, anew, once more'; rather than BAb's: 'to V anyway despite the conditions or despite the wishes of others' (*te > 0*) (p.)

-nqigte- 'to V again' (BAb); 'to V back' (p.)

B. Class-Free Postbases.

1. Quantitative judgment of speaker.

1.1. To V a lot.

-ghllag- 'to V in a big way, for a long time' (p.) (BAb) (also NN)

-ghllagu- 'to be very V; to be a big/frequent V-er' (p.) (BAb); contains the NV postbase *:(ng)u-* 'to be' (also NV); 'to have a lot of N; for there to be a lot

-ghllagu- 'to be very V; to be a big/frequent V-er' (p.) (BAb); contains the NV postbase *:(ng)u-* 'to be' (also NV: 'to have a lot of N; for there to be a lot of N'); with intransitive and usually adjectival verbs, but it also occurs with agentive verbs with an adjectival meaning such as:

qepghaghllagu- 'to be very busy' (NBK/-35, 50)

Cf. *qepghagh-* 'to work' (BAb-183)

The remaining postbases in this subsection contain the postbase *-vag-* or *+/-pag-*. The semantic differences between the various forms of this VV postbase are unclear; they originally must have been phonologically conditioned allomorphs of the same form. The corresponding NN postbase, which is more often discussed in the literature, will here be used to exemplify some of the uncertainties. The NN postbase is marginally productive, but occurs with a large number of items, with a meaning more specialized than that of *-ghllag-*. According to MEa-107-8, this NN postbase (given as the marginally productive *-ghpag-* in BAb-272) indicates a bigger size than *-ghllag-*. According to Menovshchikov (1962:107-8), the allomorphy is *-vag-* after a vowel and *+pag-* after a consonant, but he also claims that for some words the original allomorphy has come to refer to a difference in size, so that *+pag-* is 'bigger' and *-vag-* is 'biggest', which seems to be a rather dubious assertion. He also states that for some words, *-vag-* has a predictable meaning, whereas *+pag-* has a specialized meaning, as in *angyavak* 'big umiak', versus *angyaghpak* 'steamer, ship'. This last assertion is in agreement with the facts for the corresponding VV postbase, since the form *+pag-* is the less productive one, and also has specialized meanings, at least in some forms. As far as the difference between VV *+pag-* and VV *-pag-* is concerned, there seems to be no clear pattern conditioning their morphophonological boundary symbols. Certain tendencies are present, however. In postbases derived with *+/-pag-*, it appears that all postbases with a basically negative meaning have the - (minus) boundary symbol (as in *-pafqagh-*, *-pagigat^oe-*, *-pagit^oe-*, *-pagnaanghit^oe-*, *-pagnanigh-*, *-pagpe-*, *-pagumangit^oe-*, *-pagunghit^oe-*, *-panghit^oe-*), and that most of the other derived postbases have the + (plus) boundary symbol (as in *+pagaatagh-*, and the nonproductive forms *+paghqu-*, *+paghte-*, *+pagtagh-*, *+pagtaghqe-*, and *+pagte-*). When *+/-pag-* forms lexicalized combinations with NV postbases, it also has a - boundary symbol. The resulting NV postbases are *-lipag-* 'to provide with too much N'; from *-ligh-* 'to provide with N; to put N in' (BAb-281) (p.). Example:

taghyulipag- 'to put in too much salt' (BAb-15)

Cf. *taghyugh-* 'salt' (BAb-219)

and *+tupag-* 'to take too much N (food or tobacco)'; from *+tugh-* 'to eat N' (BAb-303) (p.). Example:

tawaqatupag- 'to take a lot of tobacco' (BAb-236)

Cf. *tawaqa-* 'tobacco' (BAb-225)

-vag- 'to V in a big way' (BAb); also: 'intensively, excessively, so much'. The relationship of this form to *+/-pag-* is discussed in the above paragraph (p.) (also NN)

+/-pag- 'to V in a big way, intensively, excessively, so much' (with specialized meanings?) (marginally productive; possibly productive in the SFE) (also NN). Examples in which *+/-pag-* is definitely lexicalized:

esghapag- 'to watch; to look at' (EMa-81, 82, 95; MEc-64; RUa-607;

BAb-58, 151; JAa-262)

Cf. *esghagh-* 'to open one's eyes; to see' (BAb-58)

napaghpag- 'for one's hopes to rise'

Cf. <R> *napagh-* 'erected' (BAb-127)

tupagpag- 'to get startled'

Cf. *tupag-* 'to get startled' (BAb-235)

Examples in which *+/-pag-* is marginally productive:

aqfaatepag- 'to run so hard' (BAb-153)

Cf. *aqfaate-* 'to run' (BAb-42)

ayveghapag- 'to kill a lot of walrus' (RUa-605)

Cf. *ayveghagh-* 'to kill a walrus' (NBK/8-65; BAb-28, 269)

ggiistutepag- 'to clench one's teeth too hard on' (SI-52)

Cf. *ggiistute-* 'to clench one's teeth toward or on' (BAb-63)

ilagapag- 'to sing a lot, very long, or loudly' (RUa-605)

Cf. *ilagagh-* 'to sing' (BAb-75)

neghepag- 'to eat a lot' (BOg-217; MEc-64)

Cf. *negh(e)-* 'to eat' (BAb-131)

qavaghpag- 'to sleep long, a lot' (MEc-64; MEa-108, 118)

Cf. *qavagh-* 'to sleep; to fall asleep' (BAb-177)

qepghaghpag- 'to work a lot' (MEc-64)

Cf. *qepghagh-* 'to work' (BAb-183)

tenglugpag- 'to hit, punch hard' (NBK/10-6)

Cf. *tenglug-* 'to punch with one's fist' (BAb-229)

ukinipag- 'to sew a lot' (MEc-64, MEa-108, 118)

Cf. *ukini-* 'to sew' (BAb-242)

-pagllag- 'to V too much, so much, intensively, excessively' (p.)

+pagrugllag- 'for big, huge one to V' (marginally productive?). Example:

angvigapagrugllag- 'to be a real tall one' (HEN-7)

Cf. *angvigagh-* 'to be tall (of a person)' (BAb-37)

+rukutaagh- 'for very large, huge one to V' (p.) (also NN)

1.2. To V a little.

@+lugh- 'to V a little; little one Vs' (*tel > ll*) (p.) (BAb)

+meraagh- 'to V a little; to V lightly' (n.p.). Example:

saasqaghmeraagh- 'to hang around whether appreciated or not' (BAb-208)

Cf. *saasage-* 'to try to attract attention or seek favor so as to be invited to eat or chosen for some honor, etc.' (BAb-207)

tiigmeraagh- 'to wear light clothes'

Cf. *tiig-* 'to peel a layer off of something; to remove outer garment' (BAb-231)

-ngestagh- (less frequent idiolectal or dialectal variants:) **-ngeltagh-**, **-ngertagh-** 'to V in small movements, in a small way' (*V > e*) (n.p.?) (also NN)

In the sets of equivalent forms in the remainder of this subsection, the alternations *r / ml / vl / mr / vr / vy / mz / vz* are largely a matter of idiolect. The VV postbases all mean 'to V a little (sometimes adding politeness); to V temporarily; to hardly, barely V, to V in an attenuated way; to V lightly, frivolously'.

-mlaagh-, **-mraagh-**, **-mzaagh-**, **-vlaagh-**, **-vraagh-**, **-vzaagh-** (p., some probably marginally productive) (BAb) (also NN: 'little bit of N; little thing like N' [p.] [BAb])

-mleghagh-, **-mreghagh-**, **-mzeghagh-**, **-vleghagh-**, **-vreghagh-**,

-vzeghagh-; similar forms not in BAb's postbase dictionary are

+reghagh-, **-mseghagh-** (BAb-25), and **-vyeghagh-** (*V > e*) (p., some probably marginally productive) (BAb) (also NN: 'little bit of N; little thing like N' [p.] [BAb])

-vlegagh-, **-vregagh-**, **+regagh-** (*V > e*) (p.); BAb has the NN **+regagh-** 'little bit of N; little thing like N'

-vregh-, **-vzegh-** (p.) SFE only? (MEc-49, 50)

-vzeghiigh- (p.) SFE only? (RUa-595)

1.3. To only V, just V.

:(ng)inagh- 'to go right on V-ing; to only V' (p.) (BAb) (also NN)

-ghhiinagh- 'to only a little V' (p.?) (also NN). Example:

esghapaggiinagh- 'to only look at a little' (SI-36)

Cf. *esghapag-* 'to watch; to look at' (BAB-58)

+(a)ghesnagh- 'to just V, to V just now, to only V'; not used with consonant-ending bases (compare *-qiinagh-*); (a) is used with *e*-ending bases (p.) (BAB)

-pigesnagh- 'to V in vain, to V for naught; to finally V' (p.) (BAB)

-qiinagh- 'to just V; to only V; to V just now'; not used with vowel-ending bases, compare *-(a)ghesnagh-* (p.)

+raaghinagh- 'to only V, to nothing but V; (ironically?:) to not be very V' (p.) (also NN: 'nothing but N'; there is a lexicalized NV in:

uluraaghinagh- 'to communicate orally only')

Cf. *ulu-* [N] 'tongue; language' [BAB-244])

2. Qualitative judgment of speaker.

2.1. To V thoroughly vs. not V thoroughly.

2.1.1. To V thoroughly.

-(ngw/w)aagh- 'to diligently V, to thoroughly V' (p.) (BAB); also 'to V at the proper time' (RU-124) (*ngw* is used with vowel-ending bases, *w* with bases ending in *g* or *gh*) (also NN: 'decent, perfect, good N' at least in the SFE [RU-124]; but in BAB-269, the postbase which is formally the NN equivalent of the above VV postbase is given with rather the opposite meaning: 'imitation N; artificial N; model N; toy N; pretend N; little bit of N; thing like N'; I am not certain whether some semantic evolution has taken place or whether this is altogether an unrelated postbase; RU-125 gives the semantic equivalent of BAB's NN postbase as *-ngwagh-* [with a short vowel], which does not occur at all in my SLI data)

-(ngw/w)aaghu- 'to be a diligent, thoroughly V-er' (p.); contains the NV postbase *:(ng)u-* 'to be'

2.1.2. To rather V, kind of V, to not V thoroughly.

-kanigh- 'to be rather V, to be fairly V' (p.) (BAB) (also NN)

-siigh- 'to kind of V' (n.p.?) (there is also a productive NN *-siigh-* 'something like N' [BAB]). Example:

nenglasiigh- 'to kind of laugh' (NBK/7-7')

Cf. *nenglagh-* 'to laugh' (BAB-133)

-msiigh- 'to V ineffectively or without putting effort into it, to V lightly, to kind of V' (p.) (BAB) (also NN *-msiigh-* 'something like N' [BAB])

-vyiigh-, -vziigh- (BAB) 'to V carelessly, in a rough way, or under conditions of hardship' (p.) (also NN)

2.2. To V abnormally, crudely, wrongly.

-llaag- 'to V in a crude way; crude one Vs' (p.) (BAb) (also NN)

-llegagh- 'to V crudely, shakingly' (p.) (also NN)

-llug- 'to V in a diseased way, for poor quality or diseased one to V' (p.?) (also NN)

@-lluggagh- 'to V somewhat wrongly or abnormally (?)' (*te > ø*) (n.p.) (there is a productive NN -*lluggagh-* 'dear little meek N' [BAb-391]). Example:

allaghluggagh- 'to be mysterious, to be magic, a miracle' (NBK/9-53; NBK/10-30, 35, 36).

Cf. *allaghte-* 'to change from the usual place to a different place' (BAb-28)

2.3. For good/big old one to V.

+rug- 'good old subject Vs; to V, exasperating speaker' (n.p.?) (Productive as an NN.). Example:

sarugaghte- 'to chip (of glass, or similar material)' (BAb-207)

Cf. <R> *sage-* 'chip' (BAb-206)

+ghrug- 'big old subject Vs' (p.) (also NN)

-qrug- 'troublesome subject Vs; to indeed V (said with some exasperation)' (p.) (also NN)

2.4. To V in the original or traditional style vs. in a new way.

2.4.1. To V in the original way, to V really, precisely, exactly.

-pigte- 'to be very V, to V a lot, really V, so much, too much' (p.) BAb's VV -*pig-* seems to be a missegmentation for -*pigte-* (there is an NN -*pig-* 'real N; genuine N; authentic N; old-fashioned N' [BAb])

-pigagh- 'to be V exactly (location)' (p.) (also NN)

-vigagh- 'to be really V; to be V a lot'; nonproductive variant of the preceding. Example:

angvigagh- 'to be tall (of a person)' (BAb-37)

Cf. *aange-* 'to be big; to be large' (BAb-36)

-pigllag- 'to really really V, to V all the way' (p.)

-pigu- 'to be so V' (p.); contains the NV postbase *:(ng)u-* 'to be'; with intransitive and usually adjectival verbs, but it also occurs with agentive verbs with an adjectival meaning such as:

qepghapigu- 'to be so busy' (NBK/4-67)

Cf. *qepghagh-* 'to work' (BAb-183)

2.4.2. To V in a new, fancy way, to V as an improvement.

@+ragh- 'to V in a new way, beautifully' (*ter >rr*) (n.p.); related to the NN *+reghragh-* (?) 'new N' (NBK/Ø-34, 49); also NV *-ragh-* 'to catch or kill N (hunted animal)' (n.p.) Example:

aarragh- 'to dress beautifully, dress up' (EMa-94; BAb-45)

Cf. *aate-* 'to put on (clothes)' (BAb-45)

uyguragh- 'to add more than one additional length (?)' (JAa-355)

Cf. *uygu-* 'to extend; to add length to' (BAb-254)

+raagh- 'to V well' (p.) In SFE only? (BOg-217) (also NN: *-raagh-* 'new-fangled N [as opposed to traditional style N]' [BAb-295])

+ra(a)ghagh- 'to V well' (n.p.?) (also NN: *+raghagh-* 'brand new N' [BAb-295]). Example:

pira(aghagh)- 'to benefit; to succeed; to have advantages; to have something new' (BAb-160)

Cf. *pi-* 'to do; to act; to say; to go' (BAb-157)

-qragh- 'to do fancy V-ing, to V a new thing' (p.?) (Also NN: 'fancy piece of N', rather than BAb's 'small piece of N' [BAb-294]; also VN [n.p.]).

Example:

igaqragh- 'to make a design or trim'

Cf. *igagh-* 'to make a design, to write, to apply a tattoo' (BAb-67)

kakiqragh- 'to do fancy sewing'

Cf. *kaki-* 'to sew' (BAb-87)

negikragh- 'to cut patterns'

Cf. *negig-* 'to cut out a piece of material or skin' (BAb-132)

-rragh- 'to V in a fancy way' (p.) (BAb)

3. Degree of confidence of the speaker.

3.1. To seem to V.

+sugnit^oe- 'to seem to be V-ing' (also NV: to resemble N; to be like N) (p.) (BAb)

-mrugnit^oe- 'to seem to be V to a small extent (?)' (with adjectival verbs) (p.)

3.2. To truly V.

-pestaagh- 'to truly V' (p.) (BAb) (also NN)

C. NEG Postbases. (See also A.1.2.1.2 and A.8.2)

-fqagh- 'don't V; without V-ing' (BAb); with RL endings, except that the 2s person is *-fqaavek* (p.)

-pafqagh- 'don't V too much'; with RL endings, except that the 2s person is *-pafqaavek* (p.)

-gpe- 'to not V'; only with APO (p.) (JA-76); general negative for the APO mood.

-pagpe- 'to not V too much, very much', only with APO (p.)

-qaghpe- 'to not briefly V'; only with APO (p.)

@:(ng)igat^oe- 'to never V; to not be V-ing' (*te > s*) (*ng*) is used only with bases ending in prime vowels (p.) (BAb); negative of **+(g)aqe-** (D. 3)

+laghigat^oe- 'to seldom, not often or not customarily V' (p.)

-pagigat^oe- 'to V not often, infrequently, hardly' (p.)

-qiiigat^oe- 'to never briefly V' (p.)

:(ng)it^oe- 'to lack the quality of V' (BAb); with some adjectival verbs only (marginally productive); also contained, either under its NV or VV form, in most of the postbases in this section; has the form **-ngu-** before the APO mood; the negative of NV **-lgu-** 'to have N', and NV **:(ng)u-** 'to be N' (also NV [p.])

-pagit^oe- 'to not be V too much, so much' (also NV: 'for there not to be N too much') (p.)

-ketiit^oe- 'to not tend to V' (p.); negative of **-ketagh-** (A. 2.2.3)

-llgit^oe- 'to V poorly' (p.) (BAb); from the VN **-lleg-** 'one who V's well; proficient V-er; good V-er' (BAb-282), and the NV **:(ng)it^oe-** 'to not be N'; negative of **-llgu-** (A. 4.6.1)

-llgiit^oe- 'to become a poor V-er' (p.) (BAb)

@:(i/u)mangit^oe- 'to not have V-ed or been V-ed' (p.); has the form **@:(i/u)mangu-** before the APO mood; negative of **@:(i/u)ma-** (D. 2)

-pagumangit^oe- 'to not have V-ed so much (?)' (p.)

+niit^oe- 'to not be V-able, V-ing'; negative of **+nagh-** (A. 2.2.1) (marginally productive); only with emotional verbs

@+naanghit^oe- 'to not V in the future' (*ten > nn*) (p.) (BAb); negative of **@+lleqe-** and **@+naagh-** (D. 4.1)

-pagnaanghit^oe- 'to not V too much, very much in the future' (p.)

@-nghit^oe- 'to not V' (*ten > nn*) (p.) (BAb); general negative for all moods except the APO; it is also not used with a 2nd person subject OPT mode

-panghit^oe- 'to not V sufficiently' (p.) (BAb)

-pagunghit^oe- 'to not be V sufficiently'; with adjectival and intransitive verbs only (p.)

-llghit^oe- 'to not V' (p.) (BAb); general negative, less frequent than **@-nghit^oe-**, but appears to be interchangeable with it

+pangningit^oe- 'to not be able to V, cannot V' (p.); negative of **-kayugu-?** (D. 1.1)

+yaghqiit^oe- 'not to have to V' (p.); negative of **+yaghqau-** (D. 1.3) or **+yaghqaaghte-** (A. 3.3.1)

+yaquna- 'don't ever V!'; emphatic prohibition for the future; with endings somewhat like the APO (p.) (BAb)

-yiii^oe- 'to V poorly' (p.) (BAb); negative of **-yu-** (A. 4.6.1)

+yugniit^oe- 'to not find it easy to V, to not want to V' (p.); negative of **+yugnagh-** (A. 4.6.1)

D. AUX Postbases.

1. Modality.

1.1. Ability.

-kayugu- 'to be able to V'; can be intransitive or transitive (p.) (BAb)

1.2. Prospective.

@+naqe- 'to be about to V; to intend to V; to be going to V in the near future' (BAb) (*ten > nn*) (p.); see also: **@+naqe-** (A. 3.2.1)

@+naqlaatagh- 'to be about to V again, one more time; to intend to V one more time; to be going to V in the near future again' (BAb) (*ten > nn*) (p.)

-qaghnaqe- 'to be about to V for a moment; to intend to V for a moment' (p.)

@-lgha-/gga- 'FUTURE OPTATIVE'; only with intransitive IND; the first form is used with vowel-ending bases (*tel > ll*) and the second with consonant-ending bases (p.) (BAb)

@+na- 'FUTURE OPTATIVE'; only with TRP (*ten > nn*) (p.) (BAb); 'to want to V; in order to V'; only with APO (p.) (BAb)

-qaghna- 'POLITE FUTURE OPTATIVE'; only with TRP (p.); 'to briefly want to V; in order to briefly V'; only with APO (p.)

1.3. To need to V.

@+naqngu- 'to have to V' (*ten > nn*) (p.); contains the NV :-(ng)u- 'to be N'; can be intransitive or transitive

+yaghqage- 'to need to V, to be supposed to V; to V in the future (definite future, not necessarily near future)'; transitive only (p.)

+yaghqau- 'to need to V, to be supposed to V; to V in the future (definite future, not necessarily near future)'; can be intransitive or transitive (p.)

1.4. Irrealis.

@+nayagh- 'could V, might V, should V, would V (future irrealis or polite request)' (*ten > nn*) (p.)

-qaghnayagh- 'would V for a short time' (p.)

2. Past Tense.

The difference between the Past Tense postbases -kage- / -kau- and @:(i/u)ma- is subtle; they certainly have different epistemic modal connotations: -kage- / -kau- means that the past event is reported as a matter of shared historical knowledge for which the speaker need not take total responsibility; it is often, but not necessarily, used in *ungipamsuget* (historical accounts) and always in the phrase "I was born..."; @:(i/u)ma- means that the speaker takes some responsibility for the past event reported, regardless of whether it was actually witnessed by him.

-kage- 'to have V-ed, had V-ed, or been V-ed'; transitive only (p.)

-kau- 'to have V-ed, had V-ed, or been V-ed' (BAb); can be intransitive or transitive (p.)

@:(i/u)ma- 'to have V-ed or been V-ed, to be in a state of having V-ed'; use with Participial (INP or TRP) endings described in chapter 1, section 1.6.3.3 (p.). Verb bases ending in *te* use *i*, and *te* and *ima* become *sima*; verb bases ending in *e* (not preceded by *t*) or in a consonant use *u* (BAb)

@-nghhau- 'to have recently or just V-ed' (*ten > nn*) (p.); intransitive only (?)

3. Progressive Aspect.

+(g)age- 'to be in the act of V-ing' (BAb) (p.); when there is no tense marking on the verb, the meaning of present tense is added; when there is tense

marking, the meaning is progressive only; used with Participial (INP or TRP) endings described in chapter 1, section 1.6.3.3; 'to V now and then'; only with APO mood (p.) (BAb)

+(g)aqlaatagh- 'to be V-ing again, one more time' (p.)

4. Future/Frustrative.

4.1. Future Tense.

@+lleqe- 'to V in the future' (*te > ø*) (p.) (BAb); a variant **-lleqe-** is reported for the SFE (MEc-113)

@+naagh- 'to be going to V eventually' (*ten > nn*) (p.) (BAb)

4.2. Frustrative.

+yagh- 'to V but...; to V in vain; to V without the desired results' (p.) (BAb)

5. Evidential/Imputative.

5.1. Evidential.

+fte-/+pete- 'to evidently V, to appear to V; I find that...'; this postbase indicates that the speaker did not directly or not completely witness V, but witnessed the result of V, or that the speaker quotes V out of context, as in sentences elicited in fieldwork, or as in illustrative sentences in a dictionary; **+fte-** is used after vowels, **+pete-** after consonants; MEc-58 has **-fte-** both after consonants and vowels; JAc-38 and personal communication 1988 reports that his consultant has the variant **+petefte-** after consonants (p.)

+yengagh- 'INFERENCE, it looks like V (from the evidence I have heard or seen)' (p.); not frequent, but occurs both in the SFE and on SLI; found only in *ungipaghaatet*

5.2. Imputative (compound-verbal).

@+ni- 'to say that one is V-ing or has V-ed' (*ten > nn*) (p.) (BAb)

+yuke- 'to think or believe that oneself or another is V-ing' (p.); not frequent; found only in *ungipaghaatet* from the SLI; probably no longer exists as a productive postbase for most speakers; see also: **+yuke-** (A. 2.2.2)

@+nayuke- 'to think that oneself or another might V' (p.); not frequent; found only in *ungipaghaatet* from the SLI; probably no longer exists as a productive postbase for most speakers

Postinflectional Morphology

All Eskimo languages probably possess two types of derivational morphology that can follow an inflectional ending: one type, briefly discussed in section 3.1, occurs in all Eskimo languages and consists of a NV postbase following an adverbial case ending such as a LC, TM, or VL. Greenlandic examples are given in Sadock (1991). I will not pursue the analysis of this type beyond the discussion at the end of section 3.1, since this study focuses on the second type, which involves postbases relevant to VV postbase and particle morphology. I refer to this second type only by the term "postinflectional postbase."

At the end of this chapter (section 3.4), I mention the existence of some cases of postinflectional inflectional morphology.

3.1. Postinflectional Derivational NV Morphology

One NV postinflectional postbase has already been described (Jacobson 1979:89) for CSY. It involves the productive derivational NV postbase *-et^oe-* 'to be N', which differs from any other NV postbase in that it can be attached to inflected nouns, independent pronouns, or demonstrative adverbs. The inflection must be in the LC case, and this LC case-marking part of the inflection is followed by *-et^oe-* with idiosyncratic phonology. So, there is no general explanation why a sequence of the LC inflection *-mi* and *-et^oe-* should become *-met^oe-* (example 1), whereas a sequence of the LC inflection *-ni* and *-et^oe-* becomes *-nt^oe-* after demonstrative adverbs (DA) (example 2) and *-nit^oe-* after nouns (example 3) and independent personal pronouns (PN) (example 4).

- (1) Clinic-metunga.
 clinic-mi-et^oe-unga
 (English)-LCs-be.N-IND(1s)
 'I'm staying at the clinic.' (HEN-2)

- (2) Kii, maantuten!

kii maa-ni-et^oe-uten

oh here(DA:E)-LC-be.N-IND(2s)

'Oh, you're here!' (NBK/4-66)

Mangteghan naantepigaghta?

mangteghagh-n na-ni-et^oe-pigagh-ta

house-AB(2s-s) where-LC-be.N-V.exactly-INT(3s)

'Where exactly is your house?' (HEN-15)

- (3) Yugem angyaanituq.

yug-m angyagh-(ng)ani-et^oe-uq

man-RLs boat-LC(3s-s)-be.N-IND(3s)

'He is in the man's boat.' (JA-89)

- (4) Whangamninneghituq.

whanga-mni-et^oe-nghit^oe-uq

PN1-LC(1s)-be.N-NEG-IND(3s)

'I don't have it.' (NBK/Ø-61)

In all dialects of CAY, there is a postbase cognate to the CSY form (Jacobson 1984:498). In Inuit, some CAY dialects, and Alutiiq, there is a base *et^oe-* with the same meaning, from which this aberrant postbase has originated (Jacobson 1979:89, 1984:153). In Greenlandic, the relationship between the original base and the postbase is relatively clear, since they both exist as productive elements in the language (Bergsland 1955:91).

In most Eskimo languages, there are also some other postbases that can occur only in lexicalized combinations with certain case endings, and in many of these cases it is not possible to historically derive the postinflectional element from an original base, or even from another derivational element in the language. In the Greenlandic example below, *-kar-* is a postbase which only occurs with a preceding TM case ending (Bergsland 1955:92):

- (5) Qaqqanukarput.

qaqqa-nut-kar-put

mountain-TMp-go.to.N-IND(3p)

'They went to the mountains.' (FOa-227)

In CSY, there is also a sequence *+tmiighte* 'to go N-ward', found so far with one DA, *awa-* 'over (E)' (example 6), and one PS base *ilu-* 'inside; interior' (example 7). It contains the TM ending *+tmun* and an unidentified postinflectional NV postbase element *-ighte-*. The forms in which it occurs are:

- (6) *awatmiighte-*
awa-tmun-ighte-
 over(DA:E)-TM-go.N-ward
 'to go farther away (especially of something drifting away)'
 (cf. the particle *awatmun* 'toward over there') (BAB-49)
- (7) *ilutmiighte-*
ilu-tmun-ighte-
 inside-TM-go.N-ward
 'to go inward' (BAB-76)

These sequences are so unpredictable phonologically and semantically that it is convenient to consider them to be preinflectional NV postbases. I would expect even more postbases of this type to exist in CSY, since there are several others in the closely related CAY language, as shown by the probably complete list in 8, given with the definition according to the description in Woodbury (1981:444-50):

- (8) *+kuar-* 'to go straight through/across/along the area of N, to go by way of N' (includes VL) (WO-447; JAb-473)
+kuir- (with ordinary noun bases), *+gguir-* (with DA bases) 'to follow a path through/across/ along N' (includes VL) (WO-447; JAb-451, 474)
+tmurte- 'to travel in the direction of N' (includes TM) (WO-446; JAb-574)
+tna- 'to do like N' (includes EQ) (WO-448)
+var- 'for S to move N-ward (tending to fill in the entire area)' (includes TM) (WO-444)
+virte- 'for S to follow a path N-ward' (includes TM) (WO-444; JAb-587)

The postbases discussed in this section pose interesting problems for a hierarchical theory of grammar. Indeed, from a syntactic point of view, at least some of these postbases have to be interpreted as clitics, because they function as separate

elements in the syntax (etymologically *-et'et'* was a separate element), but are bound morphologically. However, from a phonological point of view, they do not have the postlexical phonology one would expect of clitics, but have idiosyncratic lexical phonology. In an autolexical representation, this aberrant characteristic can be accounted for, since the morphological, syntactic, and phonological peculiarities of a lexical item are given in their respective autonomous modules. It is thus possible, in this model, to predict the existence of clitics with idiosyncratic phonology (Sadock 1991). Such clitics are rare in languages, but in Eskimo they are apparently possible.

3.2. Postinflectional Morphology with Adverbial Words and Particles

A second type of postinflectional derivational morphology is distinct from the type treated in 3.1 in that the postbase is not added to the preceding inflectional ending with idiosyncratic phonology and that the postbase is not forced to select just one case. Instead, the following postbase is added to the ending with a regular phonological rule, and it can occur after one of several cases. It is also as a rule etymologically connected to a preinflectional postbase. One similarity with the type described before is that the inflection is for an adverbial case. This second type of postinflectional postbase forms a rather well-defined set from a semantic point of view. It can occur productively after demonstrative adverbs (DA) inflected for adverbial cases, but not after inflected nouns or pronouns. The most intriguing characteristic of these postbases is their peculiar but regular phonological behavior when they occur immediately after the inflectional ending, and this is fully discussed in 3.3.1.

This type can also appear after demonstrative pronouns (D), but only in the absolutive singular case, which is suspicious. I argue that the so-called absolutive singular case marker *-na*, when it occurs after D bases and the related interrogative base *ki-*, is only marking the fact that the D carries no overt case marker and is neither a particle nor a vocative. Consequently, it would be preferable to reinterpret *-na* as some derivational element with very little semantic content. The AB case itself, then, would be marked as $\emptyset$, as elsewhere in the language. I base this analysis on the fact that the form in *-na* can actually function like a positional base (PS), followed by regular possessive nominal inflectional endings, with the meaning 'possessor's area of D'. This interpretation of *-na* has never been proposed before, which is not surprising, since, to my knowledge, no other Eskimo language possesses demonstratives directly followed by possessive inflection (cf. Bergsland [1955] for Greenlandic; Jakobson [1984:653] for CAY). In these other Eskimo languages, it was natural to consider *-na* to be the ABs marker, since it is never followed by other

morphological material. One must assume that the CSY type of positional base is an innovation peculiar to this language. Semantically equivalent positional bases derived from demonstratives exist in other languages, as for example in CAY, and are made of a DA base followed by the NN postbase *+te-* 'N with respect to possessor' (Jacobson 1984:569). This same construction and postbase exist also in CSY, as in the following example:

- (9) mangtegham pamatengani
 mangteghagh-m pama-te-(ng)ani
 house-RLs up(DA:O)-N,with respect.to.possessor-LC(3s-s)
 'up, back from the house' (JA-49)

It is not clear whether there is a semantic difference between the two possible CSY constructions. It is certain, however, that the construction with *-na* plus possessive nominal inflection is far more common. Examples of it are

- (10) In AB:

Paamnaka aqnigtekumkun avutkelleqamken.
 paam-na-ka aqnighte-kumkun avutke-lleqe-amken
 up(D:O)-na-AB(1s-s) hurt-CDO(1s-3s) blame-FUT-IND(1s-2s)
 'If I hurt my back, I'll blame you.' (NBK/7-26)¹

Paamnaka kuumkaghhu.
 paam-na-ka kumeg-qagh-ggu
 up(D:O)-na-AB(1s-s) scratch-briefly.V-OPT(2s-3s)
 'Scratch my back please.' (BAb-199)

uuknangi
 uuk-na-(ng)i
 approaching(D)-na-AB(3s-p)
 'the ones over here' (NBK/7-57)

¹ The D *paamna* is apparently lexicalized with the meaning 'back (body part)'.

(11) In LC:

kiiwnanganilnguut
 kiiw-na-(ng)ani-et^oe-nguut
 in(D:R)-na-LC(3s-s)-be.N-INP(3p)
 'they are at the end part of it' (SI-99)

Saam aamnanganitelleq.
 sa-m aam-na-(ng)ani-et^oe-llegh-Ø
 something-RLs over(D:O)-na-LC(3s-s)-be.N-the.one.that.V-ABS
 'A location on the other side of something' (dictionary definition of
awatangani 'on the other side of it'). (SI-39)

Iqalugem igleghusii paamnanganillu saaynganillu.
 iqalug-m iglegh-(u)sigh-(ng)i paam-na-(ng)ani=llu saye-(ng)ani=llu
 fish-RLs move-device for V-ing-AB(3s-p) up(D:O)-na-LC(3s-s)-also
 front-LC(3s-s)-also
 'Maneuvering devices of a fish, on its back or on its front' (dictionary
 definition of *metengtaq* 'fin'). (SI-100)

taagnangani
 taag-na-(ng)ani
 over(D:E)-na-LC(3s-s)
 'in that area over there' (IRR-16)

atkugem unegnangani
 atkug-m uneg-na-(ng)ani
 parka-RLs down(D:E)-na-LC(3s-s)
 'bottom part of a parka' (SI-34)

(12) In RL:

paagnangan pingi
 paag-na-(ng)an pi-(ng)i
 up(D:E)-na-RL(3s-s) thing-AB(3s-p)
 'the things on the top part of it' (APc-114)

kaamgem paagnangan tapghagh-pawaaghi
 kameg-m paag-na-ngan tapghagh-pawaagh-i
 boot-RLs up(D:E)-na-RL(3s-s) string-rather.big.N-AB(3s-p)
 'drawstrings of the top of a boot' (SI-125)

paamnangan unegnangillu
 paam-na-ngan uneg-na-ngi=llu
 up(D:O)-na-RL(3s-s) down(D:E)-na-AB(3s-p)-also
 'and of the top of its lower parts' (SI-128)

(13) In VL:

saam aamnangakun
 sa-m aam-na-(ng)akun
 something-RLs over(D:O)-na-VL(3s-s)
 'through the other side of something' (SI-39)

paamnamegteggun
 paam-na-megteggun
 up(D:O)-na-VL(3Rp-p)
 'through the back parts of them' (SI-128)

Further evidence against *-na* as an inflectional ending is that it can be followed by three NV postbases that never occur in any other presumably postinflectional positions. These are *-ligh-* 'to provide with N' (14), *-ngllagh-* 'to make N' (15), and *-(ng)u-* 'to be N' (16). Since these postbases do not semantically and syntactically form a class with the clearly postinflectional ones treated in subsection 3.3.2, I consider them exclusively preinflectional. Examples are

- (14) Elqiilaam maanalighluki piniiqii.
 Elqiilagh*-m maa-na-ligh-luki pi-ni-age-ii
 Flora.Imergan-RLs here(D:E)-na-provide.with.N-APO(3s-3p) do-
 say.that.V-PROG-IND(3s-3p)
 'Flora says she put these on' (pointing at tattoos). (NBK/7-55)

- (15) maanangllagh-
 here(D:E)-na-make.N-
 'to make this' (NBK/5-30, 31, 69; NBK/7-50; NBK/8-77)

Tamanangllaqaghnga!
 tama-na-ngllagh-qagh-nga
 there(D:E)-na-make.N-briefly.V-OPT(2s-1s)
 'Make me that! (pointing)' (NBK/5-39)

- (16) Aaptelleq kinangutmeng.
 aapte-llegh-Ø ki-na-(ng)u-(u)te-meng
 ask-act.of.V-ing-ABs who-na-be.N-device.for.V-ing-MDs
 'Asking for who it is' (dictionary definition of *kina* 'who?'). (SI-79)

kinanguzin?
 ki-na-(ng)u-zin
 who-na-be.N-INT(2s)
 'Who are you?' (BAb-131)

taananguuq
 taa-na-(ng)u-uq
 there(D:R)-na-be.N-IND(3s)
 'that's the one' (MV-256)

On the basis of the evidence above, I conclude that since the element *-na* is not an inflectional ending, the presence of this element is no indication that a postbase following it is postinflectional. In the remainder of this chapter, I assume that postbases following *-na* are preinflectional unless commonly found in a clearly postinflectional position. Examples of postinflectional postbases following *-na* are provided in subsection 3.3.2.

It appears that the argument for *-na* is also valid for the element *-ku-*, which occurs in demonstrative pronouns that are further inflected for dual or plural number (Jacobson 1979:40). Consider, for example, the following etymologically demonstrative forms (also given and further discussed as examples (132) and (134) in subsection 3.3.2.2):

- (17) paamkunginaat
 paam-ku-(ng)inagh*-t
 up(D:O)-PL-only.N-ABp
 'only Siberians' (NBK/7-57)

taakunginaghhaat
 taa-ku-(ng)inagh*-ghhagh*-t
 there(D:R)-PL-only.N-small.N-ABp
 'only these' (NBK/7-56)

taakunginaghagneng
 taa-ku-(ng)inagh*-ghhagh*-gneng
 there(D:R)-PL-only.N-small.N-MDd
 'with all one's might' (RUa-495)

Here, nonsingularity is marked twice: once as the element *-ku-* and once as part of the final ABp or MDd case endings. It is preferable to consider this number marking with *-na* or *-ku-* as secondary, since it cannot replace a full inflection, which encodes a lot more information than the distinction between singular and nonsingular. Apparently, *-na* indicates that only a singular inflection can follow, if an inflection follows at all, and *-ku-* indicates that only a nonsingular inflection can follow, but they are not inflectional endings themselves.

I find that this second class of postinflectional postbases can also occur with particles. Since a particle is by definition uninflected, there would not appear to be any evidence that the following postbase is a postinflectional one rather than a preinflectional one. (In a few cases, there is some direct evidence, when the particle contains a frozen inflectional ending.) The main evidence is phonological, and is presented in subsection 3.3.1. It is true that for particles ending in certain phonemes, no such phonological evidence is available, so that both postinflectional and preinflectional interpretations are possible. Even for these, one can argue that the postinflectional interpretation is still the correct one, since these particles behave syntactically like demonstrative adverbs with postinflectional postbases. The phonologically ambiguous forms are clearly indicated in the data in subsection 3.3.2.1.

Many of the particles involved are demonstratives, either interjectional demonstrative particles or lexicalized inflected demonstrative adverbs. Some are inflected pronominal bases (PN) and positional bases (PS) that can be considered particles, and some are of Chukchi origin. Often, but not always, the postbases form nonproductive, idiomatic combinations with these particles.

The matter of particles is complicated somewhat by the fact that there is in CSY a group of time words which can be either nouns or particles and can be semantically related in a predictable way, but which are otherwise homophones. Some examples are in 18.

- (18) aghnegh- 'day' (N); 'earlier in a day' (PT) (HEN-17; BAb-8; SI-14)
 ayumigh*- 'year' (N); 'long ago' (PT) (BAb-61)
 unaagh- 'morning' (N); 'this morning' (PT) (HEN-20, 23; NBK/4-35; BAb-342)
 'unug- 'night' (N); 'last night' (PT) (BAb-346)

When these forms are affixed with postbases formally identical to postbases that do occur postinflectionally, the question is whether the resulting forms are nouns followed by preinflectional postbases or particles followed by postinflectional postbases. With Woodbury (1981:273-74), I consider them to be particles with postinflectional postbases, since their syntax is like that of particles and not like that of nouns.

From a syntactic point of view, all the words with a postinflectional postbase appear to behave like their counterparts without postinflectional material, if this postinflectional material is not inflected itself. There are also cases where the postinflectional postbase is itself inflected as a noun or as a verb, so in effect the postinflectional postbase acts as a PT to N or as a PT to V derivational element. In subsection 3.3.2.1, the data without final inflection are presented; in subsection 3.3.2.2, the data with inflection after the postinflectional postbases are presented.

Prior to the discussion and presentation of the CSY data, some comparative comments are in order. In Greenlandic, as in CSY, there are productive postinflectional postbases following adverbial inflections and particles, and they are also etymologically related to preinflectional Class-Free postbases (Bergsland 1955:131-35; Fortescue 1984:329-30). There are even some postbase forms cognate with CSY, such as *:-innar-*, *:-ginnar-* 'only' (Bergsland 1955:133), CSY *-(ng)inagh*-*; *-(r)luinnar-* 'entirely, completely, quite' (Bergsland 1955:134), CSY *-ghllug-* and *-(ng)inagh*-*; and maybe *:-ngaar-* 'very, greatly, strongly', CSY *-(ngw/w)aagh-*. Examples are

- (19) *maanaangaaq*
masana-ngaar-
 now-greatly
 'right now' (FO-329)
- aatsaaginnaq*
aatsaa-ginnar-
 for.first.time-only
 '(only) just now' (FO-329)

kingumuinnaq
kingu-mut-innar-
back-TMs-only
'just backwards' (FO-231)

ukiarminiinaq
ukiar-mi-innar-
autumn-ABLS-only
'only since autumn' (Maria Bittner, personal communication)

In CAY, however, a language genetically and especially geographically much closer to CSY than Greenlandic, such productive postinflectional postbases appear to be uncommon. It is possible that they were more frequent in earlier stages of this language. The following is an exhaustive list of the nonproductive cases of postinflectional suffixation in CAY that are PT-deriving combinations with a particle containing an adverbial case inflection.

With *-ar(ar*)-* 'little piece of N' (Jacobson 1984:433); probably cognate with CSY *-qaagh-*; can follow a LC case, and is apparently always followed, and in the second example also preceded, by *ʔku*:

- (20) uumiaraqu or uumiarqu
uu-mi-ar(ar*)-ku
'in the near future' (JAb-406)
- wanikuarqu or wanikuaqu
wa-ni-ku-ar(ar*)-ku
'after a little while; just a minute' (JAb-410; WOO)

The sequences *-ar(ar*)-ku* or *-ku-ar(ar*)-* can also follow uninflected particles, as in

- (21) atakuaruq
ata-ku-ar(ar*)-
'early evening, dusk; to be a calm evening' [apparently a N or a V, ata-
kuar(ar*)-] (JAb-87)

atataarqu
 atata-ar(ar*)-ku
 'a little later' (JAb-88)

icivaaraqu or icivaarqu
 icivar-ar(ar*)-ku
 'in the near future, soon' (JAb-157)

With %ku 'places time-related words on the future' (Jacobson 1984:472); cognate with CSY -kun; can follow a LC case or a possessed AB case, as in the third example of 22:

(22) allamiku
 alla-mi-ku
 'next year' (JAb-84-85)

allragniku
 allra-gni-ku
 'next year' (JAb-59)

amatiiku
 ama-te-ii-ku
 over(DA:O)-N.with.respect.to.possessor-AB(3s-p)-in.the.future
 'two days/years hence; three days/years hence' (JAb-62)

ernermiku
 erner-mi-ku
 'next noon' (WOO)

ukaniku
 uka-ni-ku
 'in the future' (JAb-387)

uumiku
 uu-mi-ku
 'next time' (JAb-406)

waniku
 wa-ni-ku
 'after a while' (JAb-410)

As in CSY, *ʔku* can also follow uninflected particles; examples are given in Jacobson (1984:472).² *ʔku* can be followed by a postbase as in *ernermikutaq* or *ernequtaq* 'lunch, noon meal'; it can also be followed by an inflectional ending, as in *allamikuani* [LC(3s-s)] 'in the year after it' or as in the examples in note 2. *ʔku* can follow or precede the postinflectional postbase *-ar(ar*)*-, discussed above.

With *-ɾpag-* 'large N, big N' (Jacobson 1984:547); cognate with CSY *-pag-*; can follow a TM (first example of 23) or a LC case (second and third examples of 23):

- (23) ak'anurpak
 ak'a-nun-ɾpag-
 'a very long time' (JAb-49)

uumirpak
 uu-mi-ɾpag-
 'in the past few days' (JAb-406)

wanirpak
 wa-ni-ɾpag-
 'flow and for a short time hence' (JAb-410)

As in CSY, *-ɾpag-* can also follow uninflected particles; some examples are given in Jacobson (1984:547). The following form should also be noted, since it contains the postbase following an enclitic; the demonstrative PT and the enclitic are a lexicalized PT:

² Note in particular *unuaku* (probably from *unug-a-ku-*) 'tomorrow morning' versus *unuaqu* (probably from *unug-arar*-ku*) 'tomorrow'; in these two forms, the phonology and semantics of the element occurring between *unug-* 'night' and *ʔku* are not entirely clear. Both can occur with following inflections, as in *unuakumi* 'in the morning' (LCs) (Jacobson 1984:472); *unuaquani* 'the day after it' [LC(3s-s)] (Jacobson 1984:473); *unuaquaqan* 'daily' [CTO(3s)] (Jacobson 1984:397).

- (24) maa-irpak
 maa=i-rpag-
 'this time' (JAb-221)

The following is a list of the productive postinflectional postbases of CAY that can be used with particles and adverbs. There are four semantically related Class-Free postbases (see chapter 2, subsection 2.3.2) that form productive combinations with D in the AB case, but there is only indirect evidence for a postinflectional analysis in such cases. As seen before, a preinflectional analysis would only be proven if the element *-na* cannot occur. Examples are

With *-lkug-* 'no good, darned N':

- (25) ingnalkuk
 ing-na-lkug-
 'that no-good (person)' (JAb-486)

With *-qtar-* 'weak, helpless, worthless N' (26), which can be followed by *-ller(ar*)-* 'shabby, old N' (27):

- (26) unaqtaq
 u-na-qtar-Ø
 'this darn one' (JAb-542)
- (27) kiugnaqtall'er
 kiug-na-qtar-ller(ar*)-Ø
 'that contemptible one back there' (JAb-542)

The Class-Free postbase *-ɽ(ur)lur** 'poor dear N' occurs with demonstratives (28), and can also form lexicalized combinations with a few particles (29):

- (28) una'urluq
 u-na-ɽ(ur)lur*-Ø
 'this poor dear one' (WOO)
- (29) ciiurluq?
 ciin-ɽ(ur)lur*-
 'why, poor dear one?' (JAb-554)

waqaurluq?
 waqaa-r(ur)lur*
 'how are you, poor dear one?' (WOO)

With *-saarar** 'wretched N':

- (30) makuusaaraat!
 ma-ku(with vocative length)-saarar*-t
 'you wretched ones here!' (WOO)

CAY also has a postbase *+(a)r-* 'to say or "go"...' (word or sound) which can be used after any utterance, and therefore can also be postinflectional (Woodbury 1981:464; Jacobson 1984:545). The CSY equivalent of this postbase is *+gh-* and appears only twice in my data:

- (31) thank you-ghamtek
 thank you-gh-amtek
 (English)-say.N-IND(1s-2d)
 'I say "thank you" to you' (NBK/7-56)
- (32) yaghlegillughtuq
 yaghlegi=llu-gh-tuq
 no-again-say.N-IND(3s)
 'he said "yaghlegillu"' (T/53-32)

3.3. The Postinflectional Postbases of CSY

3.3.1. Discussion and Analysis

It can be expected that the cases of postinflectional morphology presented below in subsection 3.3.2 will cause problems for a theory of word-formation, since from the empirical facts found in most languages, and European languages in particular, it could be concluded that in suffixation the derivation-inflection order is the only normal one, maybe even the only possible one.

One way to avoid any problems would be to consider these postinflectional postbases to be enclitics. Like the postbases discussed in section 3.1, they can indeed be expected to have cliticlike characteristics. However, from the phonological point of view, further discussed below, the sandhi phenomena caused by postinflectional

postbases are no more similar to the ones caused by enclitics than they are to the ones caused by preinflectional or inflectional morphemes. As far as morphology is concerned, almost all postinflectional postbases have a preinflectional correspondent, that is--at least semantically and etymologically--closely related to it; no such relationship ever exists between enclitics and postbases. The respective position of postinflectional elements and enclitics is also different, since enclitics follow postinflectional postbases, as seen in the second form of 112; in one CAY form (24), an enclitic appears to precede the postbase, but this should not be counted as a counterexample, since the whole form is certainly lexicalized. Enclitics, of course, are never inflected, but postinflectional postbases are sometimes inflected.

It is thus clear that it is impossible to argue for the position that postinflectional elements are enclitics in the narrow sense of the word.

Before the data can be discussed within a theoretical framework of word formation, an overview of the phonological phenomena distinguishing preinflectional from postinflectional elements is necessary. Progressively but provisionally eliminated from the discussion are the rather large number of forms that do not display the convincing evidence, but that do not contradict it either. The discussion is limited to those elements which are postinflectional on the surface (i.e., postinflectional postbases preceded by an inflectional ending) and thus excludes elements which occur after particles. These will be brought into the picture later.

The interesting phonological fact is that when a postbase occurs immediately after an inflectional ending, there is a large amount of leveling of the different types of phonological boundaries that can accompany postbases when they are preinflectional. The implications of this for lexical phonology will be discussed later.

Also of note is that nothing particular happens to the phonology of a postinflectional postbase that follows another postinflectional postbase; the phonology of the second postbase is the same as that of its preinflectional correspondent, and we can conclude that the phonological boundary is the same. In effect, postinflectional postbases are recursive elements of derivational morphology which can form new bases from inflected words. Examples are *kanaverugpagllak* (106) for a form without final inflection and *taagavenginaallenglillu* (136) for a form with final inflection. There are thus different boundaries only at the junction between the inflectional ending and the immediately following postbase. For convenience, the postinflectional postbases that can occur immediately after an inflectional ending are listed in 33 and 34, with the number under which they are presented in subsections 3.3.2.1 and 3.3.2.2. (The postinflectional postbases not given below are thus the ones found with particles only or the ones that can only occur after other postinflectional postbases.)

(33) Presented in subsection 3.3.2.1:

(2)	-ghhagh*-/ngiighhagh-	'a little bit'
(4)	-ghllug-	'?'
(5)	-kun (SFE -ku)	'the next N'
(6)	-lqaaghagh-	'a bit farther, further'
(7)	-lqinagh-	'for a while; for a distance'
(8)	-lqusigh-	'all N; throughout the N'
(9)	-(ng)inagh*-	'only, 'merely'
(10)	-(ngw/w)aagh-	'completely, thoroughly, exactly'
(12)	-qaaghagh-	'a little more (in time or space)'
(14)	-rug-	'a long time ago; far away'
(15)	-staaghagh-	'small, short (distance or time)'

(34) Presented in subsection 3.3.2.2:

(1)	-kaghqagh-	'something intended for'
(2)	-staagh-	'to go in the way indicated by the DA (?)'

The inflectional ending preceding a postinflectional postbase is almost always the ending of a Demonstrative Adverb (DA). A chart of these endings is (35).

(35)	EQ	+ten
	LC	+ni
	MD	+ken
	TM	+vek or +tmun
	VL	+gun

The only cases in my data where another type of inflectional ending was found are 66 with a LC(3s-s) ending :*(ng)ani*; 77 with a VL(3s-s) ending :*(ng)akun*; 86 and 87 with an EQp ending +*stun*; and 88 with an EQs ending -*tun*. But, as stated in the individual discussions of these forms in subsection 3.3.2.1, these should certainly be considered lexicalized particles composed of etymologically inflected forms and a postinflectional postbase. I also assume, as before, that the element -*na* occurring in demonstrative pronouns is not an inflectional ending, but this will have no bearing on the discussion of phonological boundaries.

From the data in 35, it follows that the only possible phonological units immediately preceding a postinflectional postbase will be the vowel /i/, and the consonants /k/ and /n/. Since all the postbases of 33 and 34 occur without

phonological changes after vowels, just as they would after vowels in preinflectional position, the phonological difference between preinflectional and postinflectional postbases is not displayed. Therefore, the forms with an inflection ending in a vowel will not be further discussed. The interesting forms are then the ones with inflections ending in /n/ and /k/. Ignoring for now the special case of postbase *-ghhagh**/*-ngiighhagh-*, I show in examples 62, 68, 74, 76, 80, 82, 103, 105, 106, 114, 136, 138, 140, 145, and 146 that, no matter what the original preinflectional boundary and the corresponding postbase allomorph would be, the final consonant of the inflected form (i.e., /k/ or /n/) is deleted before the postinflectional postbase and that this postbase remains in its underlying form, which turns out to be the same as the preinflectional postvocalic form. For example, one would expect the postbase *-(ng)inagh** to have the allomorph *-inaq* after a consonant by analogy with its preinflectional behavior with a word-final surface *-k*. Form 76 would thus be expected to be **tawaveginaq*.

This is not a possible form. So, it would appear that *-(ng)inagh** behaves like a dropping postbase instead when postinflectional and that all other postinflectional postbases behave in the same way. It will not do, however, to say that postinflectional postbases have acquired a deleting (or "dropping") boundary, since final *-n* is also deleted and there is no boundary in the preinflectional phonology that can delete *-n*. Therefore, there is no preinflectional boundary that can delete both *-n* and *-k*. I assume, then, that there is a particular type of phonological rule occurring between inflectional endings and postbases. This type of rule has never been discussed in CSY grammatical literature, and is interesting in that it wipes out the various existing preinflectional boundaries at one particular point of word-formation and replaces them by some kind of deletion. This phonological rule is formulated below.

Of note is that the postinflectional postbase *-ghhagh**/*-ngiighhagh-* is the only postinflectional postbase with two allomorphs. These allomorphs are actually the same as the preinflectional allomorphs; in this position, *-ghhagh** occurs after consonants and *-ngiighhagh-* after vowels (Menovshchikov 1962:106).³ In postinflectional position, however, the distribution and accompanying phonology of these allomorphs is quite different: *-ngiighhagh-* is found following *-k* and *-n* with the expected phonology for postinflectional postbases; *-ghhagh** is found only in a few rather poorly understood lexicalized particles (56, 58). Even in the case of this

³ In Badten et al. (1987):271, there is the form *nunaghhaq* 'little land', where my consultants would say *nunanguighhaq*. It is possible that for some SLI speakers there is a leveling of the allomorphs in favor of *-ghhagh**.

somewhat problematic postbase, the phonological evidence for its postinflectional status is compelling.

When one looks at postinflectional postbases which have not been found in preinflectional position, it is clear that their phonology is the same as the one of the postbases given in 33 and 34 and that it could not be a possible phonology of a hypothetical preinflectional correspondent. An example is 98, in which *-qaaghagh-* causes the preceding *-n* to drop.

As for the set of postbases that can follow particles, it is justified to call these postinflectional even though no inflection is present, since the same final-consonant-deleting phonology occurs. Particles can end in *-n* (cf. examples in 72, 111, 118, 121); in *-m* (cf. examples in 90, 119, 137, 139); in *-ng* (cf. examples in 55, 59, 91, 92, 110); in *-k* (underlying *-g-*) (cf. examples in 53, 54, 73, 126); in *-q* (underlying *-gh-*) (cf. examples in 61, 70, 71, 73, 99, 109, 111, 116, 119, 121-124, 129); in *-kw* (underlying *-gw-*, spelled <w>) (cf. example in 54); and of course also in vowels (cf. examples in 52, 83, 84, 95, 100-102, 112, 117, 119, 131, 133). The expected consonant deletion clearly takes place with particles ending in *-n* and *-ng*, although in the case of *-ng* one can argue that there is no evidence for deletion when the postinflectional postbase itself begins with *-ng*, since one would expect there to be one /ŋ/ on the surface because of a very general rule simplifying identical clusters (or geminates) in CSY. Such cases are found in 55, 91, and 92. With the particle *katam* (137 and 139), deletion of *-m* does not appear to apply, and I have no explanation for this. This exception is not due to a phonological peculiarity of *-m*, since it does delete in other particles, such as *atunem* (90).

Particles can also end in the surface consonants *-k*, *-q*, and *-kw*. I assume that these are underlying *-g-*, *-gh-*, and *-w-*, respectively, because many of the particles ending with such consonants can also be noun bases, and noun bases clearly possess these underlying elements. These particles have a final phonology typical of regular noun bases, and thus there is no phonological evidence that they are followed by postinflectional postbases. Since these combinations of particles with postbases display a large amount of distributional and semantical parallelism with particles and demonstratives that are followed by phonologically unambiguous postinflectional postbases, it would be desirable to consider such combinations as involving postinflectional postbases as well. It is certainly no coincidence that the semantically well-defined class of postbases following inflectional endings is about the same as the class of postbases that can follow uninflected particles. Since inflectional endings do not end in the segments *-q*, and *-kw*, it is possible to state that these two segments will always be followed by postbases with preinflectional phonology. However, the treatment of particle-final *-k* is different from the *-k* that is part of an inflectional

ending. Thus, the generalization that all combinations of a particle and a following postbase are actually postinflectional can only be maintained if one states that *-k* is deleted by a postinflectional postbase only when *-k* is part of an inflectional ending and that, otherwise, the preinflectional phonology applies to *-k*. Forms with unambiguously preinflectional phonology are *nunmaawhaq* or *nunmaaggaq* (54), and *unuggiinaq* (53), since the phonologically postinflectional **nunmaangiighhaq* or **unungiighhiinaq* are impossible.

Therefore, the postbases of the set we have been calling "postinflectional" follow such particles with their regular preinflectional phonologies, even though in most cases there is ambiguity, since these regular phonologies are most often deleting, too.

At this point, it is possible to formulate an informal and rather inelegant rule which works for all postbases I have considered postinflectional:

(36) When adding a postinflectional postbase to a word,

(a) if this word ends in a nasal (i.e., *-m*, *-n*, *-ng*) or *-k* of an inflectional ending, delete this segment (except for *-m* in one case) and attach the postbase in the form that it would have had before vowels preinflectionally; and

(b) if this word ends in another segment (including a *-k* that is not part of an inflectional ending), apply the regular preinflectional phonology.

This rule is recurrent, but, since postinflectional postbases cannot end in a nasal or in a *-k* that is part of an inflection, only part (b) will ever apply after the first postinflectional postbase is attached, and this is exactly what happens. Note also that it would be incorrect to say that part (a) of the rule feeds part (b), in that part (a) creates more vowel-final environments that the preinflectional phonology of (b) can apply to. After the segment in (a) has been deleted, no preinflectional phonology can further be applied to the word. So, after deleting the final *-n* in 85, given here as 37, it is impossible to further apply the preinflectional phonology, which would result in the deletion of the shwa before *-(ngw/w)aagh-*, as in 38:

- (37) tawatengwaaq
 tawa-ten-(ngw/w)aagh-
 'exactly like that, identical'

(38) *tawatngwaaq

Thus, the parts of the rule apply disjunctively, but are not ordered.

This rule implies that after a *-k* of an inflectional ending, the postinflectional deletion, and not the preinflectional phonology, would apply. Thus, the form in 39, further discussed in 97, is predicted, but not the form in 40, which has preinflectional phonology:

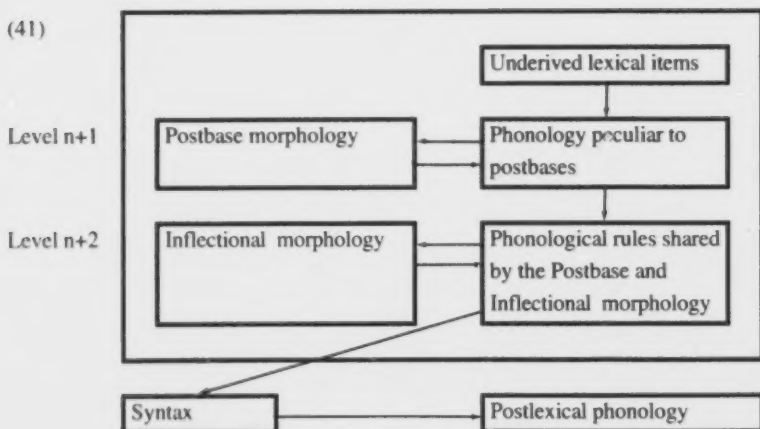
(39) taagaveqaaghaq
taaga-vek-qaaghaq-

(40) *taagavekaaghaq

In the discussion of demonstrative pronouns (D) ending in *-na* in section 3.2, I argued that the element *-na* is not an inflectional ending. But, as demonstrated by the discussion of particles above, the absence of an inflectional ending does not imply that the postbases of a word are all preinflectional. Both preinflectional and postinflectional interpretations remain possible. Since *-na* ends in a vowel, there also cannot be any phonological evidence for or against a postinflectional interpretation. From a semantic point of view, however, postinflectional postbases follow adverbial elements, such as demonstrative adverbs and particles. Demonstrative pronouns are equivalent to noun phrases, and since the postbases with corresponding postinflectional forms are always preinflectional when affixed to noun phrases, it is reasonable to assume that postbases following demonstrative pronouns are actually preinflectional.

One of the ways to deal with the phenomena treated so far in a theory of word-formation would be to postulate a separate type of affix occurring after inflectional endings and particles. The phonological manifestation of the separateness of this class of affixes could be described by the rule in 36. Such an approach is argued for by Aronoff and Sridhar (1983), who point out for English and Kannada the need for two distinct types of affixes, *word affixes*, attached to words, and *stem affixes*, attached to stems, each with their distinctive phonology. It might be possible to consider postinflectional affixes to be word affixes and all other affixes to be stem affixes in CSY. This approach can be rejected, since the features of a word affix given by Aronoff and Sridhar (1983:5-6) do not correspond at all to those of a CSY postinflectional affix. For example, word affixes attach only to words that are members of major lexical categories, whereas postinflectional affixes attach to a DA or PT only. Word affixes are not sensitive to the internal morphological structure of

(41)

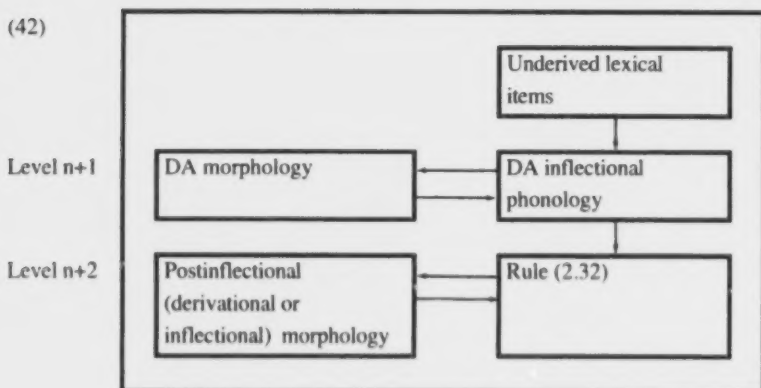


the word to which they are attached, whereas postinflectional elements are very sensitive to this structure, since they attach to case-inflected demonstratives only, but not to any other case inflection.

Another way to integrate postinflectional morphology in a theory of word-formation is provided by Kiparsky's (1982:4) model of lexical phonology and morphology. For the normal CSY word the diagram in 41 might be appropriate. I ignore in this chapter the problem of branching affixes, which cannot be accommodated at all in a model of lexical phonology and which has already been discussed in chapter 2, subsection 2.2.1.3.

The evidence for the division between levels $n+1$ and $n+2$ is due to the difference between phonological rules which apply between the base and postbase combinations, and the rules which apply between the base and inflection combinations. All rules which apply to the base and inflection combinations also apply to the base and postbase combinations, but not the other way around. Thus, part of the productive derivational morphology (i.e., the postbase morphology and the inflectional morphology of level $n+2$) must be set up as one level. For the most part, there is in Eskimo no connection between the phonological properties of a boundary (described in Jakobson [1979:4-15]) and the particular orders that postbases and inflectional endings with these types of boundaries can occur in. Thus, within level $n+2$, it is impossible to make one type of phonology neatly correspond to one type of boundary, and there seems to be no straightforward way to solve the problem in the theory (Jenkins 1984; Mendez 1984). On the postlexical level, one needs to distinguish between enclitic phonology and fast speech phonology (see chapter 4,

(42)



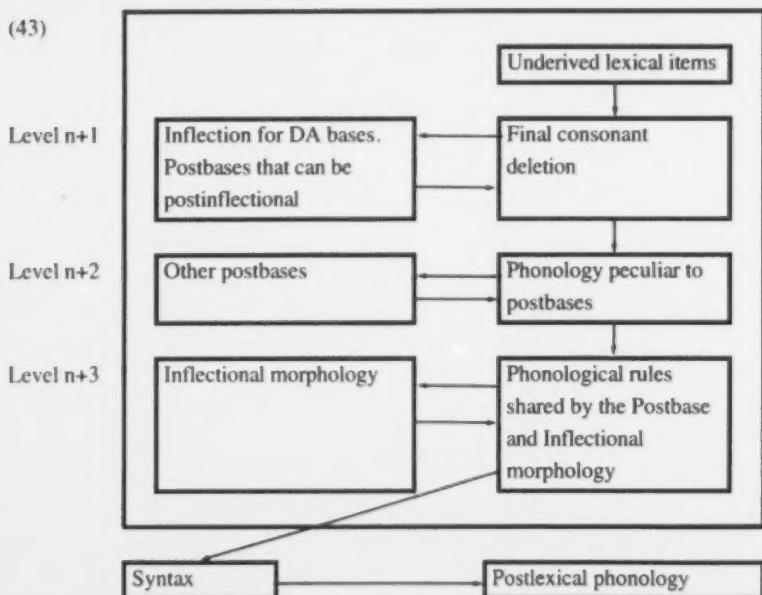
section 4.1). These two later levels are assumed, and not argued for here, since their precise content is not relevant for postinflectional morphology.

One also has to find a way to derive the sequence base-inflectional ending-postbase that is found in combinations with inflected demonstrative adverbs and postbases. Intrinsic to the model of lexical phonology is the notion that a strict linear order must be followed in word formation. Thus, if an affix *x* is determined, for phonological reasons, to combine to a base *y* at level *n*, then this affix *x* cannot be combined with the base *y* at level *n*+1. Given this notion of strict linear ordering, it will be impossible to derive the order base-inflectional ending-postbase by using the model in 41, since after the level *n*+2 affixation of an inflectional ending, it is not possible to affix a level *n*+1 postbase. It is, therefore, impossible to obtain the sequence inflectional ending-postbase.

Assuming for now that only words with postinflectional phonology existed in the language, one could argue for the model of level-ordered phonology illustrated by the diagram in 42.

In the model of 42, it is actually easier to argue for the discreteness of levels *n*+1 and *n*+2, than it would be in 41. Level *n*+1 only contains a closed set of demonstrative adverbs always immediately followed by a case inflection; these case inflection suffixes (listed in 35) are different from the case inflection suffixes in level *n*+2 of the model in 41 in that they have different forms and they are always added by the same phonological process (symbolized in the list in 35 by a + [plus] boundary). Level *n*+2 only contains the set of postinflectional postbases (or, for postinflectional inflection, a set of inflectional endings [see section 3.4]). In diagram 42, the

(43)



formation of demonstrative adverbs thus starts at level $n+1$, and the formation of particles starts at level $n+2$.

A model of grammar allowing two different and incompatible models of level-ordered morphology (illustrated by 41 and 42) would be highly undesirable, since it would imply the existence of two lexicons. Therefore, it is necessary to integrate the two models in one. A tentative diagram of such an integration would look like 43.

The demonstrative adverb inflection is affixed at level $n+1$ since it is followed by level $n+1$ postbases. If one allows the construction of the demonstrative adverb and inflection combination at level $n+1$, the correct linear order is obtained. That is, the sequence demonstrative adverb-inflection-postbase can be derived. However, there is no way to obtain the phonology peculiar to the demonstrative adverb-inflection combination, since the phonological rule that applies here is one from the set of phonological rules shared by the postbase and inflectional morphology which applies at level $n+3$. There is no obvious way to prevent the other rules of this set from applying first and thereby bleeding the correct rule. Conversely, if the desired peculiar phonology is derived by allowing the correct rule to apply at a level $n+4$ along with level $n+4$ affixation of inflection to demonstrative adverb, the bleeding of the correct rule is blocked, but the correct linear order demonstrative adverb-inflection-postbase cannot be derived.

Even assuming the possibility that the correct phonology and linear order for the sequence demonstrative adverb-inflection-postbase can be derived, one finds additional problems with deriving the phonology of postinflectional postbases. Along with the morphological process which affixes a postinflectional postbase to an inflected demonstrative adverb, the phonological rule deleting a final consonant must be allowed to apply at level $n+1$. This rule will correctly provide the necessary phonology between the inflected demonstrative adverb and the postinflectional postbase. Furthermore, this ordering will correctly derive the level $n+2$ and level $n+3$ postbase phonology which applies on level $n+2$ postbase sequences that follow the initial postinflectional postbase in a demonstrative adverb-inflection-postinflectional postbase sequence. However, the set of postinflectional postbases which can occur after an inflected demonstrative adverb is almost exactly a subset of the postbases that are involved in level $n+2$ word formation. Indeed, these postinflectional postbases are largely the same as the set of level $n+2$ Class-Free postbases given in chapter 2, subsection 2.5.3 (list section B. 1). The correspondence is not perfect, but it is expected that a preinflectional equivalent of every postinflectional postbase will be discovered as more research on CSY postbases is carried out. By allowing for the set of (potentially postinflectional) postbases to be involved in level $n+1$ word formation, one does not allow for the ordering of these postbases after those at level $n+2$. This is clearly an incorrect result, since the set of postbases involved at level $n+1$ can occur in a variety of positions after level $n+2$ postbases.

In order to derive the order base-postbase-(potentially postinflectional) postbase, it would be necessary to reintroduce the affixation of the postinflectional postbases at level $n+2$. However, this would amount to rejecting an intrinsic claim of the theory of lexical phonology that phonological rule types are linked to particular morphological processes: the most general phonological rules apply to the most productive morphology and the most specific phonological rules apply to the least morphologically productive processes. The reintroduction of postinflectional postbases at level $n+2$ would claim a single type of morphology for both less productive phonology (level $n+1$ affixation of postinflectional postbases) and more productive phonology (level $n+2$ affixation of potentially postinflectional postbases).

In diagram 43, I have ignored the combinations of particles with potentially postinflectional postbases. These would have to be formed on level $n+2$, since they undergo the phonological rules of that level and the next one. It is also necessary to add to that level a rule of final nasal deletion. The correspondence of the set of postbases at that level to the postbases involved at level $n+1$ would not be predicted, and, again, as stated in the preceding paragraph, one would obtain two types of phonology for one type of morphology.

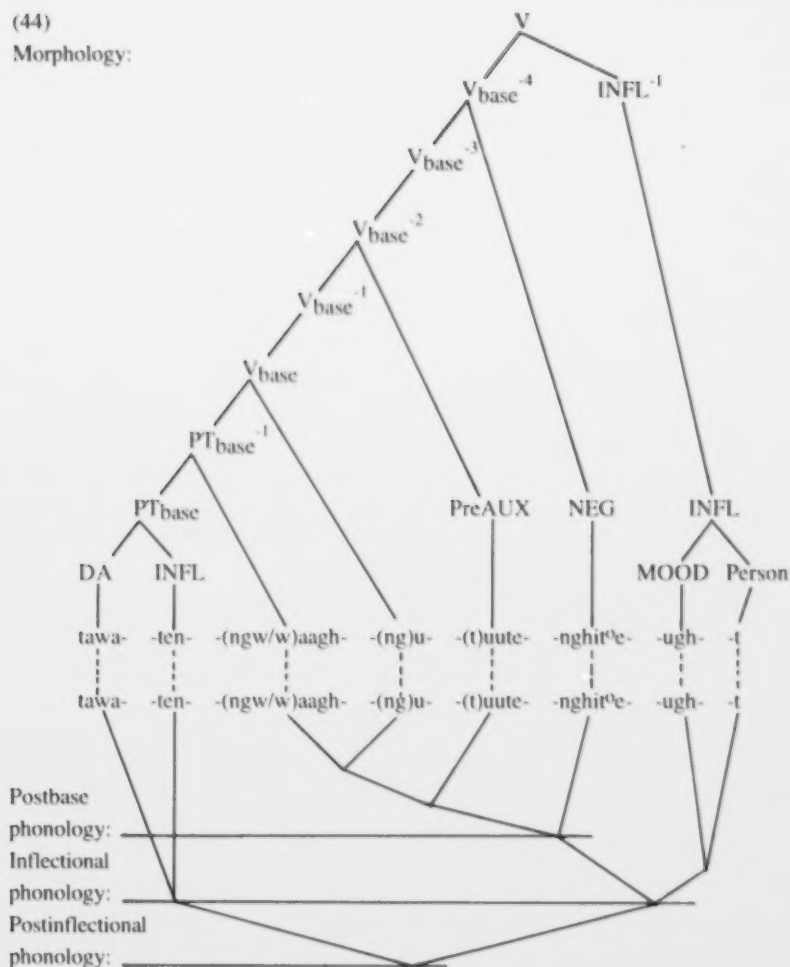
It will also be noted that the model does not account for the existence of lexicalized particles containing nominal or pronominal inflections that are not demonstrative adverbial case inflections (cf. 66, 77, 86). In order to form these, the only possibility would be to allow some recursion from level $n+3$ back into level $n+1$. This back loop is of course a very powerful device, and it could be used to derive all the postinflectional morphology as well as many impossible formations. Because it weakens the theory considerably, Kiparsky (1982:10, 29) rejects it, but does not totally exclude its use in some cases. One could follow the same course in using this device only for these special cases of lexicalized particles, but it is not clear to me how it could be constrained to apply only to these special cases.

In conclusion, it appears that lexical phonology accounts quite poorly for the morphological facts of CSY.

For the remainder of this subsection, I give an autolexical account of postinflectional postbases. As pointed out in chapter 1, section 1.5, the postinflectional postbases discussed in this chapter are part of a "clitic cline" (i.e., they are part of a set of elements that have both morphological and syntactic characteristics). I assume that in an autolexical model there will also be an autonomous phonological representation and that, in this representation, there will be various phonological levels that match points on this clitic cline. However, the phonological levels do not necessarily have to correspond to the clitic cline in such a way that the less cliticlike the element the more lexical the phonology will be and the more cliticlike the element, the more postlexical the phonology will be. This correspondence will only be the default tendency and will hold true for most languages (but not for Eskimo). Thus, even though the phonology of the postinflectional postbases discussed in section 3.1 is definitely lexical and has to go on the postbase phonology level, at least (or maybe even on a deeper level), they are very cliticlike syntactically. By contrast, the postinflectional postbases discussed in sections 3.2 and 3.3 are rather less cliticlike syntactically, but have a definitely cliticlike phonology, approaching in regularity the exceptionless postlexical phonology typical of full-fledged clitics (see chapter 4). Hence, I will consider the postinflectional postbases discussed in sections 3.2 and 3.3 to have their own level (called here postinflectional) in an autolexical phonological module, while considering them regular postbases in the morphological module. An autolexical representation of *tawatengwaaghutuunneghitut* 'they are not all the same' (example 140) will then be as in 44. The lines at the bottom part of this representation are the levels in the phonological representation.

(44)

Morphology:



The same type of diagram can be used for combinations of particles with potentially postinflectional postbases and for postinflectional inflection (see section 3.4). Such a representation shows that the claim intrinsic to lexical phonology that there is a correlation between affix order and phonology (brought out by level ordering) does not accurately predict the CSY facts.

3.3.2. Presentation of the Data

3.3.2.1. Postinflectional Postbases without Following Inflection

What follows is a numbered list of all the postbases involved, with tentative meanings and etymologies and with statements on productivity and the other postbases with which they can occur in postinflectional position. The numbers in parentheses following postbases refer to other postbases in the list. In order to demonstrate their relative productivity, examples of all inflected words and particles with which these postbases are found are provided.

(1) **-agh-** This postbase element of uncertain meaning seems to occur only in the following lexicalized combinations of itself and another postinflectional postbase: *-lqaaghaq* (*-lqaagh-agh-*), examples under *-lqaagh-* (6); *-qaaghaq* (*-qaagh-agh-*), examples under *-qaagh-* (12); *-yaghaq* (*-yagh-agh-*), examples under *-yagh-* (16). This element also exists in many preinflectional postbases.

(2) **-ghhagh*-/ngiighhagh-** 'a little bit'; from the NN postbase *-ghhagh*-/ngiighhagh-* 'little N; small N; bit of N' (BAB-271). The following are productive combinations.

(45) DA in EQ:

natengiighhaq

na-ten-ngiighhagh-

'a bit like that, slightly, temporarily' (NBK/1-67; NBK/4-44, 46, 47; T/53-5", 27; APc-263; SLa-39)

tawatengiighhaq

tawa-ten-ngiighhagh-

'in a small way' (T/53-3"; MEc-206)

(46) DA in LC:

taakwaningiighhaq

taakwa-ni-ngiighhagh-

'a little closer' (APc-128; SLc-48)

teskananengiighhaq
 teskana-ni-ngiighhagh-
 'just close by' (NBK/1-52)

- (47) DA in MD:

taakwegkengiighhaq
 taakw-ken-ngiighhagh-
 'from a short distance' (RUa-497)

- (48) DA in TM:

tawavengiighhaq
 tawa-vek-ngiighhagh-
 'just there' (IRR-7)

- (49) DA in VL:

taaggungiighhaq
 taag-gun-ngiighhagh-
 'a bit too close over there' (NBK/1-10)

The combinations with particles in 50 through 54 are probably productive, too; *yaywaasengiighhaq* is probably not. In the forms of 52 through 55 there is no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible.

- (50) PT with etymological EQ:

maatengiighhaq
 maa-ten-ngiighhagh-
 'only just' (MEc-213)

- (51) PT with etymological VL:

qantaghaqungiighhaq
 qantaghagh-kun-ngiighhagh-
 'soon' (BAb-242; RUa-256)

- (52) D as a PT:

ingangiighhaq
inga-ngiighhagh-
'right across' (NBK/1-10)

- (53) Time word PT:

unuggiinaq
unug-ghhagh*-(ng)inagh*
'in only one night' (NBK/7-45)

Particles from Chukchi with this postbase include:

- (54) nunmaawhaq or nunmaaggag
nunmaaw- or nunmaag-ghhagh*
'slowly' (NBK/0-45, 60; NBK/7-33; NBK/8-29; NBK/10-8, 15, 22, 34; PF;
RUa-379)
- (55) yaywaasengiighhaq
yaywaaseng-ngiighhagh-
'all right, happily (endearing)' (MEc-206)

I am not certain whether the following lexicalized combinations contain the PT *maaten* (etymologically a DA in the EQ case) followed by *-ghhagh** (compare with the phonologically regular *maatengiighhaq* in 50):

- (56) maategghhaq
maa-ten(?)-ghhagh*
now-little.N
'a short while ago' (NBK/0-42, 57; NBK/4-61; PF; BAa-53, 65)
- (57) maateggharegagghhaq
maa-ten(?)-ghhagh*-regagh-ghhagh*
now-little.N-little.bit.N-little.N
'just now' (RUa-322)

- (58) *maategghiinaq*
maa-ten(?) -ghhagh-(ng)inagh*-*
now-little.N-only.N
 'only now' (RUa-322)

Examples 57 and 58, as well as *unuggiinaq* (53), contain presumably lexicalized combinations of postbases; *maateggharegaghhaq* is peculiar in that the postbase under discussion occurs twice in it; *-regagh-* is not discussed further, since this word is its only occurrence postinflectionally. In *maategghiinaq* (58) and *unuggiinaq* (53), the order of postbases is the reverse of what generally occurs (see also example 63 under *-ghllug-* [4]). The two different orders including *-ghhagh**- and *-(ng)inagh**- (9) are further discussed in 3.3.2.2.

Other lexicalized combinations in which the postbase occurs are *-staaghhaq* (*-staagh-ghhagh**-) and *-staghhaq* (*-stagh-ghhagh**-), discussed under *-staaghagh-* (15), and *-yaghhaq* (*-yagh-ghhagh**-), discussed under *-yagh-* (16). One combination which appears to be productive is *-(ng)inaghhaq* [*-(ng)inagh*-ghhagh**]; examples are given under *-(ng)inagh**- (9).

(3) *-ghllag-* 'more, very'; from the Class-Free postbase *-ghllag-* (see the corresponding VV in chapter 2, subsection 2.5.3, list section B. 1.1). This postbase occurs only in lexicalized combinations with particles, and not immediately after inflected forms; it does occur affixed to postbases that immediately follow inflected forms. Combinations with a PT from Chukchi are given in 59 and 60:

- (59) *iiwleghllak*
iiwleng-ghllag-
 'always, without exception' (IRR-5; RUa-180)

quunpeghllak
quunpeng-ghllag-
 'very often' (AN-20, 22; SL-1; SLa-11; IRR-22)

- (60) *wataghllak*
wata-ghllag-
 'much more; please do' (NBK/8-24; BAb-360; RUa-566)

- (61) qayughllak
 qayugh-ghllag-
 'because' (NBK/5-45, 52, 55; NBK/6-50; NBK/7-18, 60; NBK/9-58, 63, 73,
 76; BAb-249; BAa-40, 790)

In the forms of 60 and 61, there is no phonological evidence showing that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible.

-ghllag- occurs productively after the postinflectional postbase -lqusigh- (8) as -lqusighllak; see under that postbase for examples. -ghllag- is also common in the lexicalized combination -rugllak (-rug-ghllag-); the combination -rugpaghllak (-rug-pag-ghllag-), however, is probably not lexicalized. Examples are given under -rug- (14).

- (4) -ghllug- probably means 'N departed from its natural state'; it is related to the VN postbase -neghllug- 'something that's hard to V' (BAb-288) and formally identical VV 'to V wrongly or with difficulty' in chapter 2, subsection 2.5.3, list section A. 4.6.2.1, and to the NN postbase -llug- 'poor quality, diseased N' (BAb-283). There is a Class-Free postbase in CAY, -llug- 'N that has departed from his natural state; to be somewhat V', that corresponds phonetically (and probably semantically) to the CSY form. -ghllug- occurs only in possibly lexicalized combinations with -ghhagh*- (2) (compare with the NN postbase -luggagh*- 'dear little meek N') and with -(ngw/w)aagh- (10). The combination -ghlluggagh*- can also be followed by -(ng)inagh*- (9). The resulting words are very likely lexicalized combinations.

- (62) DA in EQ:

tawateghlluggaq
 tawa-ten-ghllug-ghhagh*-
 'that's exactly so' (RUa-496)

whateghlluwaag
 wha-ten-ghllug-(ngw/w)aagh-
 'exactly like this' (WYa-81)

(63) DA in LC:

tawanighlluggiinaq

tawa-ni-ghllug-ghhagh*-(ng)inagh*-

'at once, as soon as' (WY-3, 5, 10, 19, 54, 75, 95)

tawanighlluwaag

tawa-ni-ghllug-(ngw/w)aagh-

'at the exact time' (APc-206)

(5) **-kun** (in the SFE **-ku**) is basically a nonproductive PT-forming postbase meaning 'the next' with some time-related words. It is etymologically the VLs ending **-kun** and is mentioned here because it can be added to two lexicalized particles etymologically in the LC case. Example 64 is built on the PT *ilangani* 'meanwhile', etymologically the LC(3s-s) form of *ila-* 'part, one of' (BAb-74; RUa-161-62), and appears to have the same meaning as the PT *ilangakun* (SFE *ilangaku*) 'sometimes' (BAb-74; RUa-161), etymologically the VL(3s-s) form:

(64) PT from an N:

ilanganikun

ila-(ng)ani-kun

'sometimes' (SI-89)

(65) PT from a DA:

whanikun, whaniku

wha-ni-kun, -ku

'later on, in the evening' (BAb-361; RUa-573)

(6) **-lqaagh-** 'a bit further, farther' does not appear to exist as a preinflectional postbase; its etymology is unclear; it is certainly related to **-qaagh-** (12), since it has the same meaning. The only example in my data is a PS in the LC case, which is certainly a lexicalized particle (PT) (BAb-49):

- (66) awatanganilqaaq
 awata-(ng)ani-lqaagh-
 area.on.the.other.side.of-LC(3s-s)-a bit further
 'last year, further back' (NBK/1-74)

There is also an occurrence of what is presumably a lexicalized combination of this postbase with *-agh-* (1).

- (67) DA in LC:

 taaganilqaaghaq
 taaga-ni-lqaagh-agh-
 'a little farther over there' (SLe-39)

(7) *-lqinagh-* 'for a while; for a distance'; this is related to the VV postbase *-lqinagh-* 'to V for a long time' (see chapter 2, subsection 2.5.3, list section A. 8.4). There is certainly also a relationship to *-(ng)inagh**- (9). Productive examples are

- (68) DA in TM:

 taagavelqinaq
 taaga-vek-lqinagh-
 'for a longer space' (SI-121)

 tazingavelqinaq
 tazinga-vek-lqinagh-
 'for a little distance' (SLa-18)

A lexicalized example with a PT is

- (69) maatelqinaq
 maa-ten-lqinagh-
 'for quite a long time; earlier in the same day' (RUa-322)

In the forms with PT in 70 and 71, there is no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible. These combinations are probably also lexicalized.

- (70) qavngalqinaq
 qavngagh-lqinagh-
 'quite a while back' (NBK/1-63; NBK/8-23; BAb-246; RUa-240)

The forms in 71 are combinations of a PT with *-lqinagh-* and *-pag-* (11):

- (71) akugaalqinaghpak
 akugaagh-lqinagh-pag-
 'several days or weeks ago' (NBK/1-9)
- qavngalqinaghpak
 qavngagh-lqinagh-pag-
 'a month ago, several months ago' (NBK/1-9)

(8) *-lqusigh-* 'all N; throughout the N'; used with time words that can function as particles, see BAb-284 for six examples of these. Probably related to the VV *-lqusiigh-* 'to V angrily' (see chapter 2, subsection 2.5.3, list section A. 4.4), but I have no explanation for the difference in vowel length. Also used with another PT(69). *-ghllag-* (3) can occur productively after *-lqusigh-* (66):

- (72) aawhkalqusiq
 aawhkan-lqusigh-
 'since some time ago' (BAb-284)
- (73) aghnelqusighllak
 aghnegh-lqusigh-ghllag-
 'the entire day' (SLc-39)
- unulqusighllak
 unug-lqusigh-ghllag-
 'the entire night' (OT-10)

(9) *-(ng)inagh** 'only, merely'; from the Class-Free postbase *-(ng)inagh-* (see the corresponding VV in chapter 2, subsection 2.5.3, list section B. 1.3). Productive combinations with demonstratives are

- (74) DA in EQ:

tawatenginaq
tawa-ten-(ng)inagh*
'just like that; all the time' (RUa-496)

(75) DA in LC:

tazimaninginaq
tazima-ni-(ng)inagh*
'only then, in olden times' (RUa-484)

(76) DA in TM:

amavenginaq
ama-vek-(ng)inagh*
'only towards over there' (SI-161)

maavenginaq
maa-vek-(ng)inagh*
'only towards here' (T/43-65)

tamaavenginaq
tamaa-vek-(ng)inagh*
'only towards there' (APc-206)

tawavenginaq
tawa-vek-(ng)inagh*
'only so far' (AN-46)

Probably productive combinations with particles include:

(77) PT from N, inflected VL(3s-3) (see also under *-kun* [5]):

ilangakunginaq
ila-(ng)akun-(ng)inagh*
'only rarely' (NBK/4-54)

(78) PT from DA in EQ:

maatenginaq
 maa-ten-(ng)inagh*
 'only now, just' (MEc-212)

Definitely lexicalized forms with a DA are given in 79 and 80. They function as particles.

(79) DA in LC:

tawaninginaq
 tawa-ni-(ng)inagh*
 'right away, immediately, at once, only at that time, as soon as' (NBK/10-3, 10; HEN-23; APc-206; WY-passim)

It is not clear what the precise semantic difference is between the above form and *tawanighlluggiinaq* (see 4).

(80) DA in VL:

qamagunginaq
 qama-gun-(ng)inagh*
 'in one's mind, without expressing it' (T/43-45; BAb-239; MEc-206; RUa-252)

This postbase occurs in apparently productive combinations with a following postbase *-ghhagh**- [see also 2 and 4 for forms with other combinations containing *-ghhagh**- and *-(ng)inagh**-]:

(81) DA in LC:

un'ganinginaghhaq
 un'ga-ni-(ng)inagh**-ghhagh**-
 'a bit just down there' (APc-97)

whaninginaghhaq
 wha-ni-(ng)inagh**-ghhagh**-
 'here only and nowhere else' (WYb-49)

(82) DA in TM:

tawavenginaghhaq
 tawa-vek-(ng)inagh*-ghhagh*-
 'a bit just so far' (SLc-42)

In the following forms containing the demonstrative PT *taawa* 'here it is; there it is; it's ready', there is no phonological evidence showing that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible. Example 83 is certainly a lexicalized particle; 84 is *taawanginaq* plus the productive postbase *-ghhagh**:

- (83) *taawanginaq*
*taawa-(ng)inagh**-
 'but, only (in an adversative sense)' (NBK/4-57; NBK/6-3, 5, 28, 55, 56;
 NBK/7-54; HEN-13; BAb-33; MEc-206; RUa-495)

- (84) *taawaginaghhaq*
taawa-(ng)inagh-ghhagh**-
 'sole; one and only' (SI-34; RUa-495)

*-nginagh** also occurs in the presumably lexicalized combination *-staghhiinaq* (*-staghghagh-nginagh**); an example is given under *-staghghagh-* (15).

(10) *-(ngw/w)aagh-* 'completely, thoroughly, exactly'; from the Class-Free postbase *-(ngw/w)aagh-* (see the corresponding VV in chapter 2, subsection 2.5.3, list section B. 3.1.1). It occurs postinflectionally only after EQ case endings; productive combinations are

(85) DA in EQ:

tawatengwaaq
 tawa-ten-(ngw/w)aagh-
 'exactly like that, identical' (NBK/9-60, 65; BAb-206; SI-44; WYb-passim;
 RUa-496)

whatengwaaq
 wha-ten-(ngw/ŷ)aagh-
 'exactly like this' (AN-25; RUa-574)

The bases of the forms in 86 and 87, although etymologically a noun and a personal pronoun in the EQp case, are probably to be considered lexicalized particles. The meaning of 87 is unpredictable, and its predictable meaning would be 'like us'. I am not entirely sure of the meaning of 86, so I am not sure whether the meaning is unpredictable there, too.

- (86) unguvalghiistungwaaq
 unguva-lghii-stun-(ngw/ŷ)aagh-
 be.alive-INP-EQp-exactly
 'exactly like a living thing (?)' (T/53-21)
- (87) whangkutestungwaaq
 whang-kute-stun-(ngw/ŷ)aagh-
 PN1-PL-EQp-exactly
 'exactly the way we speak it' (NBK/1-69)

-*(ngw/ŷ)aagh-* also occurs after the PT *pinitun* 'well', which is built of the verb base *pinigh-* 'to be good', and a nonproductive postbase deriving a particle from a verb, *-tun*. It is etymologically an EQ case ending.

- (88) pinitungwaaq
 '(generally:) very well (often translated according to context as:) beautifully, carefully, cleverly, eloquently, nicely, prudently' (NBK/4-41, 51;
 NBK/10-1 through 36; T/53-21; SEP-7; BA-56; PU-9; WYb-15, 30, 46)

It must be noted that for the SFE, *pinitungwaaq* is not recorded and the following semantically identical form is found instead (*pinitun* is also present in the SFE):

- (89) pinighwaatun
 pinigh-(ngw/ŷ)aagh-tun (MEc-206, 207; RUa-413)

In this form, the postbase can be considered to be the regular VV one, since it occurs after a V base in what is at least historically a preinflectional position.

Synchronically, the particles *pitungwaaq* (88) and *pinighwaatun* (89) are lexicalized to the same degree (i.e., whether *-tun* is added to *pinigh-* or to *pinighwaagh-*, it remains the case that *-tun* is a PT from a verb-deriving postbase that is only etymologically an EQ case ending). From a diachronic point of view, I can find no evidence for considering one form younger than and historically derived from the other. It is probable that the SFE variety is more conservative in written sources, and documents the older form, since in the SFE the codification of the language in grammars and dictionaries started several decades earlier than on SLI.

Examples 90 through 92 are etymologically underived particles with *-(ngw/w)aagh-*. The forms in 91 and 92 contain particles from Chukchi. In these forms there is also no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible.

- (90) *atunengwaaq*
atunem-(ngw/w)aagh-
 'equally, in equal parts' (RUa-102)

- (91) *iiwlengwaaq*
iiwleng-(ngw/w)aagh-
 'all the time' (SLc-94; WY-35)

yataangwaaq
yataang-(ngw/w)aagh-
 'in readiness' (SLc-32; RUa-591)

The forms in 92 through 94 are unique in that the same postbase *-(ngw/w)aagh-* occurs doubled for added emphasis. Since this is also the behavior of the corresponding preinflectional VV postbase (see chapter 2, subsection 2.2.2.1), these forms are evidence that the combination particle *-(ngw/w)aagh-* is not lexicalized.

- (92) *pitungwaaghwaaq*
pinitun-(ngw/w)aagh-(ngw/w)aagh-
 'really really well' (T/53-21)
- (93) *quunpengwaaghwaaq*
quunpeng-(ngw/w)aagh-(ngw/w)aagh-
 'always and always' (SLd-21)

- (94) tawatengwaaghwaag
 tawaten-(ngw/w)aagh-(ngw/w)aagh-
 'really exactly like that' (T/43-58)

-(ngw/w)aagh- can also occur after the postinflectional postbase *-ghllag-* (4).

- (11) **-pag-** 'in a bigger way, more, further'; from the Class-Free postbase *-pag-* (see the corresponding VV in chapter 2, subsection 2.5.3, list section B. 1.1). Postinflectionally, this postbase occurs only after another postinflectional postbase, and the resulting combinations are probably lexicalized: *-lqinaghpak* (*-lqinagh-pag-*), see under *-lqinagh-* (7); *-rugpak* (*-rug-pag-*) and *rugpagllak* (*-rug-pag-ghllag-*), see under *-rug-* (14).

- (12) **-qaagh-** 'a little more (in time or space)'; its etymology is unclear, but it might be related to the VV postbase *-qagh-* or a nonproductive VV postbase *-aagh-*. It does not seem to be different semantically from *-lqaagh-* (6), and is certainly etymologically related to it. *-qaagh-* has been found with one particle, probably as a lexicalized combination, given in 95. In this particular form, there is no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible:

- (95) wataqaaq
 wata-qaagh-
 'a little more' (PU-5)

This postbase is much more common in the lexicalized combination *-qaaghaq*, which I interpret as *-qaagh-* and *-agh-* (1). Productive postinflectional combinations occurring with *-qaaghaq* are

- (96) DA in LC:

 taaganiqaaghaq
 taaga-ni-qaagh-agh-
 'further back (in time)' (NBK/1-63)

 taawaniqaaghaq
 taawa-ni-qaagh-agh-
 'further down there' (APc-10, 13)

tazikaniqaaghaq
tazika-ni-qaagh-agh-
'further over there' (APc-10)

teskananiqaaghaq
teskana-ni-qaagh-agh-
'a little bit further out' (NBK/1-51; NBK/3-36)

tespikaniqaaghaq
tespika-ni-qaagh-agh-
'further up there' (SLc-39)

(97) DA in TM:

taagaveqaaghaq
taaga-vek-qaagh-agh-
'a little farther away' (NBK/5a-60)

teskanaveqaaghaq
teskana-vek-qaagh-agh-
'further out' (NBK/1-52)

tespikaveqaaghaq
tespika-vek-qaagh-agh-
'a little bit further back' (NBK/1-20)

(98) DA in VL:

tespikaguqaaghaq
tespika-gun-qaagh-agh-
'a little bit further back there' (NBK/1-20; PU-31)

This postbase is also relatively common in probably lexicalized combinations with particles. In examples 99 (with a time word) and 100 (with a PT from Chukchi), there is again no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible:

- (99) aghneqaaghaq
 aghnegh-qaagh-agh-
 'earlier today' (NBK/1-9)

- (100) wataqaaghaq
 wata-qaagh-agh-
 'a little bit more' (HEN-10, 12; NBK/5a-20, 51, 54, 55; BA-30; SLe-17;
 SLa-20; WYb-27, 47; WY-30, 89; RUa-566)

(13) **-qrug-** 'what the hell; who the hell' (where the speaker shows exasperation and disapproval toward either the person discussed or toward the addressee); from the Class-Free postbase **-qrug-** (see chapter 2, subsection 2.5.3, list section B. 2.3). It is etymologically related to **-rug-** (14). In the forms containing this postbase, there is no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible.

A probable productive combination is

- (101) D as a PT:

whaaqruk!
 whaa-qrug-
 'here, darn, you are!' (BAb-110; SLc-73)

The following combinations with particles from Chukchi are probably lexicalized:

- (102) masisuqruk
 masisu-qrug-
 'what kind of person is that!' (RUa-320)

weniquruk
 weni-qrug-
 'I should say not' (NBK/8-42 through 58; BAb-360, RUa-567)

(14) **-rug-** 'a long time ago; far away'; related to the NN postbase **-rug-/rug-** 'good old N, big old N' (BAb-296) (see the corresponding VV in chapter 2, subsection 2.5.3, list section B. 2.3). This postbase only occurs in the following lexicalized combinations with the same meaning: **-rugllak** (**-rug-ghllag-**), the same as

the lexicalized NN postbase combination *+rugllag-* 'large N, huge N' (BAb-296); *-ruggpak* (*-rug-pag-*), *-ruggpagllak* (*-rug-pag-ghllag-*) (see [3] and [11]), and *-rukutaaq* (*-rug-* and the unidentified element *-kutaagh-*), the same as the NN postbase *+rukutaagh-* 'very big N; large N; huge N' (BAb-296). Examples of productive combinations are

(103) DA in EQ:

naterugllak
na-ten-rug-ghllag-
'somewhere there' (APc-218)

(104) DA in LC:

paganirugllak
paga-ni-rug-ghllag-
'far up there' (BA-65; MV-197)

taaganirugllak
taaga-ni-rug-ghllag-
'a long time ago' (NBK/8-51, 67; SLd-18; SLc-32)

taaganirugpak
taaga-ni-rug-pag-
'far over there' (PU-26)

tazimanirugllak
tazima-ni-rug-ghllag-
'a very long time ago' (NBK/10-24)

tazinganirugllak
tazinga-ni-rug-ghllag-
'very long ago' (T/43-1)

teskananirugpak
teskana-ni-rug-pag-
'quite a ways out there' (NBK/1-54, 59)

(105) DA in MD:

aagkerugllak
aag-ken-rug-ghllag-
'from far over there' (SL-9)

naakerugllak
na-ken-rug-ghllag-
'from somewhere far' (TE-34)

tazimakerugllak
tazima-ken-rug-ghllag-
'from the beginning of time' (APc-222)

(106) DA in TM:

agaverugllak
aga-vek-rug-ghllag-
'way over there' (SLc-23, 85)

kanaverugllak
kana-vek-rug-ghllag-
'way out down there' (SLa-42)

kanaverugpagllak
kana-vek-rug-pag-ghllag-
'very far out down there' (SLa-42)

kiwaverugllak
kiwa-vek-rug-ghllag-
'far in there' (SL-8)

naverugllak
na-vek-rug-ghllag-
'very far away' (BAb-174)

pikaverugllak
pika-vek-rug-ghllag-
'far up there' (SLa-7; SLc-95)

samaverugllak
sama-vek-rug-ghllag-
'far down there' (SLb-13)

taagaverugllak
taaga-vek-rug-ghllag-
'way out far away' (SLb-13)

ukaverugllak
uka-vek-rug-ghllag-
'far and approaching' (PU-26, 28)

(107) DA in VL:

aaggurugllak
aag-gun-rug-ghllag-
'through far over there' (NBK/9-23)

The forms with particles in 108 through 111 are probably lexicalized combinations.

(108) PT with etymological EQ ending:

maaterugpak
maa-ten-rug-pag-
'a while ago' (HEN-5, 22)

(109) PT from time words:

ayumirugllak
ayumigh-rug-ghllag-
'long ago, years ago' (T/52-1; BA-58; AN-17; TE-34; RUa-119, 606)

ayumighrukutaaq
 ayumigh-rug-kutaagh-
 'in remote antiquity' (MEa-109)

unaarugllak
 unaagh-rug-ghllag-
 'very early this morning' (SI-62)

(110) PT from Chukchi:

quunperugllak
 quunpeng-rug-ghllag-
 'forever, everlasting' (BAb-272; SLd-37, 38; WYb-52; WY-87, 131; RUa-282)

(111) Other PT:

aawhkarugllak
 aawhkan-rug-ghllag-
 'long ago' (RUa-108)

qavngarugllak
 qavngagh-rug-ghllag-
 'a long time ago, a long time since' (HEN-24; BAb-212; AN-11, 37; RUa-240)

qavngarugpak
 qavngagh-rug-pag-
 'a long time ago, a long time since' (OT-15)

In the following forms with particles derived from demonstratives as bases, there is no phonological evidence that the postbases are postinflectional, so both postinflectional and preinflectional interpretations are possible. These combinations appear to be productive.

(112) agarugllak
 aga-rug-ghllag-
 'far over there' (SL-3)

agarugllaklunguq
 aga-rug-ghllak=llu=nguq
 'and far over there, it is said' (SLb-21; SLd-14)

ingarugllak
 inga-rug-ghllag-
 'far over there' (AN-43)

kanarugllak
 kana-rug-ghllag-
 'far down there' (SLd-25)

pikarugllak
 pika-rug-ghllag-
 'way up there' (NBK/2-3; SLb-5; SEP-2, 4; PU-29)

samarugllak
 sama-rug-ghllag-
 'there, very deep down or below' (MEa-109; RUa-474)

samarukutaaq
 sama-rug-kutaagh-
 'there, very deep down or below' (MEa-109)

un'garugllak
 un'ga-rug-ghllag-
 'farther down' (APc-10)

(15) **-staaghhagh***- 'small, short (distance or time)' is a lexicalized combination of **-staagh-** (meaning uncertain) and **-ghhagh***- (2), from the N from root-deriving postbase **-(ke)staaghhagh***- 'one that lacks the quality of N; one that has the quality of N' (BAb-299). In the lexicalized combination **-staghhiinagh***- [**-stagh-ghhagh*-(ng)inagh***- (9)] (see example 115) as well as in the related preinflectional NN postbase combination **-staghhiinagh***- 'only N; each one an N' (BAb-299), the first vowel is short, a fact for which I have no explanation. Combinations with demonstratives are given below; it is not clear whether the forms in 113 and 114 are productive.

(113) DA in LC:

tawanistaagghaq
 tawa-ni-staagh-ghhagh*
 'at once, immediately' (MEc-212, 213; RUa-495)

whanistaagghaq
 wha-ni-staagh-ghhagh*
 'immediately, within earshot' (BAb-259; RUa-573)

(114) DA in TM:

tawavestaagghaq
 tawavek-staagh-ghhagh*
 'there, close by, very near' (NBK/1-10; SLc-11; BAb-215; RUa-495)

whavestaagghaq
 whavek-staagh-ghhagh*
 'here, close by' (SLa-73)

The following relatively common combination of a DA in the EQ case with *-staghagh** and *-(ng)inagh** (9) (related to the NN postbase combination given above) probably forms one lexicalized particle:

- (115) tawatestagghiinaq
 tawa-ten-stagh-ghhagh*-(ng)inagh*
 'like that all the time, continually, constantly' (BAb-226; NBK/6-15;
 NBK/Ø-7; BAa-72, 79; RUa-496)

(16) *-yagh-* 'early'; I am not certain of the precise meaning and etymology of this postbase; it is probably related to the VV postbase *-yaghagh-* 'to V early' (see chapter 2, subsection 2.5.3, list section A. 8.1). It might also be related to the CAY nonproductive N from root-deriving postbase *%yar-* (JAb-592). This postbase occurs with the particles in 116 through 118. It is often followed by *-agh-* (1) (see 116 and 118) or *-ghhagh** (2) (see 117). All of these are probably lexicalized. In 117, there is no phonological evidence showing that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible.

- (116) PT from time words:

akugaayaghaq
 akugaagh-yagh-agh-
 'last week' (NBK/4-49)

unaayaghaq
 unaagh-yagh-agh-
 'early in the morning' (RUa-545)

- (117) PT from Chukchi:

aamtayaq
 aamta-yagh-
 'as we know (from earlier experience)' (OT-10; AN-38, 59)

aamtayaghhaq
 aamta-yagh-*ghhagh**-
 'how well we know' (BAb-33)

- (118) Other PT:

aawhkayaghaq
 aawhkan-yagh-agh-
 'several days ago, some time ago' (NBK/1-9, 52)

(17) **Residual cases.** There are several other unsatisfactorily identified morphemes or combinations of morphemes that can occur after particles. In these forms, there is no phonological evidence that the postbase is postinflectional, so both postinflectional and preinflectional interpretations are possible. I am not always sure about the meaning and form of the postbases involved, since there is only one example of each. For the sake of completeness, I merely list these examples here (see also under [2] for some other residual cases containing *-ghhagh**):

- (119) pegnemqaghtaq
 pegnem-qaghtagh- or maybe pegnem-mqaghtagh-
 'just barely' (PF)

qavnganghhaq

qavngagh-nghhagh-

'recently, formerly, the other day' (SI-22; RUa-240)

temngiraaghinaq

temngi-raagh-(ng)inagh*-

'completely in vain, for nothing' (T/53-35; PU-6, 7; OT-3; MEc-206; RUa-515)

3.3.2.2. Postinflectional Postbases with Following Inflection

Certain postinflectional postbases or combinations of postinflectional postbases can occur followed by certain inflectional endings. A correct interpretation of what was found is difficult, since the data are very scant. In some cases, there are what appear to be regular postbases after the typically postinflectional postbases (examples 130, 133, 135, 136, 140); in some other cases, there are postinflectional postbases present that have not been found without their own inflection (examples 144 through 147). In effect, the postinflectional postbases and postbase combinations discussed in this subsection act like nominalizing or verbalizing postbases added to adverbial words. In this subsection, whether a postinflectional postbase is nominalizing or verbalizing will be indicated by (N) or (V).

The only clear pattern emerging in the data indicates that there is a class of lexicalized particles built of a PT base followed by an postinflectional postbase or postbase combinations and an inflectional ending, as shown in 120 (N):

- (120)
- | | | | |
|---------|---|-----------|----------|
| (-rug-) | $\left\{ \begin{array}{l} \text{-pag-} \\ \text{(-ghllag-)} \end{array} \right\}$ | -ghhagh*- | MD(3s-s) |
|---------|---|-----------|----------|

One could infer from this diagram the existence of the sequence **-rugpaggaaneng*, but this has not yet been documented. The meaning of the resulting particle is roughly 'for a time in the past'; 'a time ago'. The unit of time is indicated by the PT base, and the length of time is indicated by the postbase(s). A complete list of examples occurring in my data is given in 121 through 124.

- (121) With the sequence *-ghhaaneng*:

akugaaghhaaneng
 akugaagh-**ghhagh***(ng)aneng
 'a few days ago' (NBK/1-11, 51)

aawhkahhaaneng
 aawhkan-**ghhagh***(ng)aneng
 'for ages (in the past)' (BAb-223)

ighivgaghhaaneng
 ighivgagh-**ghhagh***(ng)aneng
 'since morning' (RUa-609)

qavngaghhaaneng
 qavngagh-**ghhagh***(ng)aneng
 'for some time (in the past)' (NBK/4-66, 67)

unaaghhaaneng
 unaagh-**ghhagh***(ng)aneng
 'since morning' (NBK/6-16, 17)

(122) With the sequence *-ghllaggaaneng*:

ayumighllaggaaneng
 ayumigh-**ghllag-ghhagh***(ng)aneng
 'for years (in the past)' (SLd-27)

qavngaghllaggaaneng
 qavngagh-**ghllag-ghhagh***(ng)aneng
 'for a very long time, for many years (in the past)' (HEN-15; NBK/10-9)

(123) With the sequence *-paggaaneng*:

qavngaghpaggaaneng
 qavngagh-pag-**ghhagh***(ng)aneng
 'for some time' (BAb-143)

(124) With the sequence *-rugllaggaaneng*:

maaterugllaggaaneng
 maa-ten-rug-ghllag-ghhagh*-(ng)aneng
 'in an hour's time (in the past)' (SLa-43)

qavngarugllaggaaneng
 qavngagh-rug-ghllag-ghhagh*-(ng)aneng
 'for, in a long time (in the past)' (HEN-5; NBK/4-66)

It is clear that such forms are lexicalized, in particular because of the obligatory presence of *-ghhagh** and its meaning, which seems to be totally unrelated to the meaning of preinflectional *-ghhagh**.

Certainly inflected postinflectional postbases are not necessarily lexicalized, but the remaining cases are rather unrevealing and unclear. Some of these other cases are listed below, but it should be kept in mind that there is no way of telling whether it is a representative sample of a pattern or a collection of nonproductive oddities. These examples with postinflectional postbases, already given in subsection 3.3.2.1, are

With *-ghhagh*-/ngiighhagh-* as the first postbase (N):

(125) With ABs:

kinangiighhaq
 ki-na-ngiighhagh-Ø
 'anyone at all' (in sentences with a negative verb only) (MV-210)

(126) With LCs:

unuggiinaghmi
 unug-ghhagh*-(ng)inagh*-mi
 'overnight' (NBK/2-15)

*-ghhagh** can also occur before *-(ng)inagh**, as shown in 126 (see also *unuggiinaq* [example 53], *maategghiinaq* [58], and *tawanighlluggiinaq* [63]). Concerning the combinations of *-(ng)inagh** and *-ghhagh**, it should be mentioned that only the order *-(ng)inagh*-ghhagh** seems to exist both in preinflectional and postinflection position. *-ghhagh*-(ng)inagh** seems to exist postinflectionally only, since *unug-* in examples 53 and 126 is an uninflected particle. The semantic difference between the two orders is unclear. It seems that both orders are lexicalized

(for *-nginaghhagh** in the preinflectional as well as in the postinflectional position), since *-ghhagh** does not have the meaning 'small' in it, but has rather a restrictive meaning, as can be seen in examples 81, 82, 84, and 125. In 127, which is a preinflectional example of the combination *-nginaghhagh** and is taken from the Gospel of Mark, this restrictive meaning is especially apparent:

- (127) Atanginaghhaghma
 ata-(ng)inagh*-ghhagh*-ma
 father-only.N-restricted.N-RL(1s-s)
 'only my Father (knows it)' (WY-124)

With *-kun* as the first postbase (V):

- (128) With IND(3s-s):

whanikwaa
 wha-ni-ku-aa
 'it is already very late' (WY-51)

- (129) With CQO(3s-s):

ayumiquyagu
 ayumigh-ku-yagu
 'when next year comes' (BAb-61)

whanikuyagu
 wha-ni-ku-yagu
 'when it was getting on toward evening' (WY-150)

It will be noted that *-kun* has an allomorph without final *-n* when it is not the last morpheme of a word.

- (130) whanikugaqeftaa
 wha-ni-ku-(g)aqe-fte-aa
 here(DA:R)-LC-in-PROG-evidently.V-IND(3s-s)
 'I notice it's getting evening' (NBK/1-8)

With *-(ng)inagh** as the first postbase (N):

(131) With ABs:

taananginaq
 taa-na-(ng)inagh*-Ø
 'that one only, only that one' (IRR-25; RUa-491)

taananginaghhaq
 taa-na-(ng)inagh*-ghhagh*-Ø
 'only that, that only' (PU-31; RUa-491)

taawanginaaghhaq
 taawa-(ng)inagh*-ghhagh*-Ø
 'sole, one and only' (RUa-495)

(132) With ABp:

paamkunginaat
 paam-ku-(ng)inagh*-t
 'only Siberians' (NBK/7-57)

taakunginaghhaat
 taa-ku-(ng)inagh*-ghhagh*-t
 'only these' (NBK/7-56)

(133) With LCp:

taawanginaalghiini
 taawa-(ng)inagh*-(ng)u-lghii-ni
 'taawanginaq'-be.N-INP-LCp
 '(we) who use "taawanginaq"' (in a dictionary definition) (SI-70)

(134) With MDd:

taakunginaghagneng
 taa-ku-(ng)inagh*-ghhagh*-gneng
 there(D:R)-PL-only.N-restrictive.N-MDd
 'with all one's might, extremely, extraordinarily' (RUa-495)

Example 134 is most likely a lexicalized particle.

(135) With IND(3s):

taananginaghaaguq
 taa-na-(ng)inagh*-ghhagh*-(ng)u-(g)uq
 there(D:R)-na-only.N-restrictive.N-be.N-IND(3s)
 'he is the only one, only he is that' (WY-111-12)

(136) With OPT(3s):

taagavenginaallenglillu
 taaga-vek-(ng)inagh*-(ng)u-llegh-nge-li=llu
 over(DA:E)-TM-only.N-be.N-act.of.V-ing-receive.N-OPT(3s)-also
 'so that it may receive encouragement also' (WYb-46)⁴

With -(ngw/w)aagh- as the first postbase (N or V):

(137) With ABs:

katamngwaaq
 katam-(ngw/w)aagh-Ø
 'exact (thing), just right' (SI-90, 104)

(138) With ABp:

tawatengwaaghet
 tawa-ten-(ngw/w)aagh-t
 '(things) exactly like that' (SI-44)

(139) With APO(3s):

katamngwaaghluku
 katam-(ngw/w)aagh-luku
 'being just right (as a garment fitting perfectly)' (RUa-204)

⁴ Presumably, this form contains a lexicalized noun *taagavenginaallegh-* meaning 'encouragement'.

- (140) With IND(3p), but verbalized with *-(ng)u-* 'to be N':

tawatengwaaghutuunneghitut
 tawa-ten-(ngw/w)aagh-(ng)u-(t)uute-nghit^oe-ut
 there(DA:R)-EQ-completely.N-be.N-V.in.a.group-NEG-IND(3p)
 'they are not all the same' (WYb-51)

With *-qaaghagh-* as the first postbase (N):

- (141) With LC(3s-s):

taagnaqaaghaani
 taag-na-qaaghagh-(ng)ani
 'at the time a little while ago' (IRR-preface)

- (142) With MD(3s-s):

tazingkeqaaghaaneng
 tazing-ken-qaaghagh-(ng)aneng
 'from the time a little while ago' (IRR-preface)

With *-grug-* as the first postbase (N):

- (143) With ABs:

taanaqruk
 taa-na-grug-Ø
 'such-and-such, so-and-so' (RUa-491)

Inflected postinflectional postbases that were not found without inflection are the following two available examples.

- (1) *-kaghqagh-* 'something intended for'; from the NN postbase *-kaghqagh-* 'something to be used as N; future N' (BAb-257) (N).

(144) With ABs:

taagavekaghqaaq

taaga-vek-kaghqagh-Ø

'destined for, intended for the future' (RUa-480)

(2) **-staagh-** 'to go in the way indicated by the DA (?)': the precise meaning of this postbase is uncertain. It must be related to the N from root-deriving postbase *+(ke)staagh-* 'one that lacks the quality of N; one that has the quality of N' (BAb-299) (V).

(145) taakwagustaaghaquq

taakwa-gun-staagh-aqe-uq

approaching(DA)-VL-go.through.N-PROG-IND(3s)

'he is passing by' (RUa-486)

(146) taakwagustaaghaqaa

taakwa-gun-staagh-aqe-aa

approaching(DA)-VL-go.through.N-PROG-IND(3s-s)

'he is passing through it, not far from it' (RUa-486)

Another postbase has been found after *-na* only. As discussed earlier, this is not sufficient evidence to consider it postinflectional. I have included it in this list since it is semantically parallel to postinflectional postbases, and postinflectional examples are likely to turn up:

(3) **-pestaagh-** 'real, true'; from the Class-Free postbase *-pestaagh-* (see the corresponding VV in chapter 2, subsection 2.5.3, list section B. 3) (N).

(147) With ABs:

taanapestaaq

taa-na-pestaagh-Ø

'that very one; that one, really' (RUa-491)

3.4. Postinflectional Inflection in CSY

So far the only postinflectional morphological elements discussed have been postbases; there is also in CSY a set of forms with double inflection (i.e., with one inflectional ending immediately followed by another inflectional ending). This phenomenon could also be called postinflectional inflection.

Double inflection is similar to postinflectional derivation in that the second inflection is parallel to postinflectional postbases, since its phonology is the same as that of the postinflectional postbases described and discussed in subsection 3.3.1. Actually, the rationale for mentioning postinflectional inflection at all in this chapter is its phonological similarity to postinflectional derivation: rule 36 above applies on such forms, as though the second inflectional ending was the first postinflectional postbase. So, in the forms of 151 through 154 below, a final *-n* or *-k* is deleted, and in the forms of 149 and 150 the inflectional ending appropriate for bases ending in a vowel is added to an inflectional ending with a vowel. Another similarity between postinflectional postbases and postinflectional inflection is that they both must occur after words inflected for an adverbial case. These phonological and morphological similarities could hardly be coincidental, but I am not certain of their significance, since my data on postinflectional inflection are very meager.

As was the case with postinflectional postbase derivation, double inflection does not appear to exist in CAY, although it is reported for Greenlandic; examples are given in Bergsland (1955:71) and Fortescue (1984:246-47). Whereas in CSY most of such forms are lexicalized adverbial particles, in Greenlandic there exists one rather productive construction involving an EQ case following any adverbial case:

- (148) qawanisut
 qawa-ni-tut
 south(DA:E)-LC-EQs
 'as in the south' (BE-71)

Cases of productive double inflection in CSY probably involve only the addition of the LC(3s-s) ending *-(ng)ani* to a DA which is already inflected for the LC case. This form stands in the same syntactic position as the corresponding word with one case marker; there is usually no overt element in the RL case referring to the possessor in the possessive case marker. The only occurrence of such an element was found in the following conversational exchange:

(149) Naantat negaghpagten?

na-ni-et⁰e-at negaghpag-ten

where-LC-be.N-INT(3p) fishnet-AB(2s-p)

'Where do you have your net?' (question)

Kiiwem un'ganingani.

kiiw-m un'ga-ni-(ng)ani

river-RLs down(DA:E)-LC-LC(3s-s)

'Downriver.' (answer) (HEN-15)

Here, the meaning is thus approximately 'down of it'.

In view of their semantics, all the other examples of postinflectional inflection in my corpus are probably lexicalized combinations. An exhaustive list of the forms in my corpus is given below (150-154).

Lexicalized forms involving a DA with the LC case or an adverbial PT (with an etymological LC case inflection) appear to have a temporal meaning. The clearest semantic relationship is between *unaami* 'tomorrow' and *unaamingani* 'the next day'; lit., 'at the tomorrow of it' (see third example below).

(150) taaganingani

taaga-ni-(ng)ani

'at that time, very long ago; after a long time; afterwards' (APc-114; RUa-480)

taakwaningani

taakwa-ni-(ng)ani

'lately, recently; later on, after some time; sometimes' (SLd-8; OT-12; AN-introd., 37, 61; SLa-4, 43; IRR-2; SLc-76; WYb-52; RUa-486)

unaamingani

unaagh-mi-(ng)ani

'the next day; early next morning' (NBK/1-80; NBK/3-36; NBK/7-7,17; SLa-16; WY-98, 100; BAb-196; SI-175)

Double inflection involving the VL case was found in two forms from the SFE. It will be noted that 151 contains a VL(3s-s), parallel in person marking to the LC(3s-s) treated above, and so it might be a productive combination. Example 152 contains a postinflectional VLP ending. The semantics of these forms are unclear.

- (151) taakwagungakun
taakwa-gun-(ng)akun
'across of it, on the other side of it' (RUa-486)

- (152) taakwagutgun
taakwa-gun-tgun
'here, hither' (RUa-486)

Finally, there are also two lexicalized particles indicating time which occur with a postinflectional TM inflection: one with a DA which is itself inflected for TM (153) and one with a PT with an etymological EQ inflection (154). Both appear to occur together with the PT *kenlanga* 'until'.

- (153) whavemun kenlanga or kenlanga whavemun
wha-vek-mun
'so far, up to now' (IRR-preface, I, 20, 24)
- (154) maatemun or maatemun kenlanga
maa-ten-mun
'up to the present, until now' (APc-244; RUa-323)

The Central Siberian Yupik Enclitics

The enclitics of CSY are syntactic and discourse-marking particles similar in function to the uninflected particles to be described in chapter 6. They differ from these in that they form a phonological word with the immediately preceding word, and therefore can never stand alone. However, the types of segmental phonological changes at the boundary between enclitics and words are very similar to phonological changes occurring at word boundaries in rapid speech, and have fewer similarities to the morphophonological phenomena occurring within the morphological word either preinflectionally (see chapter 1, subsection 1.6.2) or postinflectionally (see chapter 3, subsection 3.3.1). One enclitic, *=qun* 'see', also exists as an independent particle in the SFE (see below and chapter 6).

The enclitics in CSY must also be defined according to their position with respect to other morphemes in a word and their affixation possibilities to word classes. Enclitics always appear as the last elements in a word, being not only postinflectional but also following postinflectional postbases if these are present; unlike postinflectional postbases, they can attach to any word class of the language.

The only existing account of CSY enclitics is Menovshchikov (1967:253-62), which is valuable in that it gives and discusses many illustrative sentences of their use. However, the list of enclitics is incomplete, the account of their phonology and distribution is sketchy, and the discussion of their meanings is very impressionistic. A list, with short glosses, of the CSY enclitics I found is

<i>=lli</i>	'again'
<i>=llu</i>	'also; and'
<i>=mi</i>	'what about'
<i>=ngam</i>	'then'
<i>=nguq</i>	'it is said'
<i>=qa</i>	'just'
<i>=qun</i>	'see'
<i>=sa</i>	'isn't this something'
<i>=ta</i>	'there'
<i>=tuq</i>	'I hope, wish'

=wha

'ever'

=Vy

'vocative'

Some other elements, such as *-am* and *-kin*, are enclitics in CAY, but in CSY only occur with a limited number of particles, and are therefore better considered as suffixes; these, as well as idiomatic combinations of a particle and a CSY enclitic, are treated in chapter 6.

The next section concerns the phonological peculiarities of CSY enclitics; an individual description of these is given in subsection 4.2.1. Concluding every description is a short comparative note, the purpose of which is to point out which enclitics have an etymon in common Eskimo rather than to reconstruct the forms and meanings of Proto-Eskimo enclitics. Also noted is the existence of cognates in the Eskimo languages geographically close to the CSY area, in particular those in the SFE, as well as the Chukchi origin of some enclitics. A full historical and etymological treatment of Chukchi loans is given in chapter 6. Subsection 4.2.2 offers some general conclusions on the position and function of the enclitics, and section 4.3 provides combinations of more than one enclitic.

4.1. The Phonology of Enclitics

The phonological phenomena resulting from the junction of a word with an enclitic can be suprasegmental and segmental, the latter in turn divided into dissimilation, degemination, assimilation, and deletion.

The only suprasegmental phenomenon related to clitic boundaries was first noted by Krauss (1985:48-49). It appears that for some speakers at least, monosyllabic words with enclitics retain a word stress on their base (and initial) syllable, even when that syllable is short (i.e., it contains a phonological short vowel). If the word ends in a vowel there is also a slight aspiration after it, marked as [^h], which is a word-final phonetic phenomenon. Examples from Krauss (1985:48) are

(2) me=llu=qun=llu
[məʔqunlu] rather than [ma^hʔqunlu]
'a voice also, remember too?'

pik=llu=qun=llu
[pikʰqunlu] rather than [pikʰqunlu]
'(two) things also, remember too?'

The segmental phonological changes are much more general and occur at enclitic boundaries following consonant final words.

Two rules of dissimilation may apply:

Rule 1: $t \rightarrow s / \_ = t$

Examples of Rule 1 are

- (4) taakusta
 taa-ku-t=ta
 there(D:R)-PL-ABp-there
 'those there' (OT-6; AN-56; APc-86, 89)

tespikegkusta
 tespike-ku-t=ta
 up(D:R)-PL-ABp-there
 'those up there' (APc-18)

This rule also applies at word boundaries in rapid speech:

- (5) takestaaghhaat tawaveklu
 [...a:sta...]
 takestaaghhagh*-t tawa-vek=llu
 short.thing-ABp there(DA:R)-TM-also
 'at the same time it's too short' (NBK/1-5)

Rule 2: $\{ \rightarrow t / \_ = \{$

An example of Rule 2 is

- (6) elngaatatlu
 [...atlu...]
 elngaatall=llu
 really-also
 'really also' (NBK/8-37, 38, 40; IRR-24, 25)

Owing to the rarity of words with initial or final /l/, I have no examples in my data showing that this rule applies at word boundaries, but its application would be expected.

The following rule of degemination is ordered after the dissimilation rules:

Rule 3: $C_1 \rightarrow \emptyset / \_ = C_1$

Examples are

- (7) qinunaghqegpenangam
 qinunaghqe-gpe-nang=ngam
 misbehave-NEG-APO(2s)-then
 'quit fussing, then' (BAb-259)

whangkutunguq
 whang-ku-tung=nguq
 PN1-PL-AB/RL(1d)-it.is.said
 'you and I, it is said' (NBK/5-37)

awerghalghutaqun
 awerghalghutagh-Ø=qun (i.e. awerghalghutaq=qun)
 animal.farm-ABs-see
 'an animal farm, see' (MEc-259)

Rule 3 also applies at word boundaries in rapid speech:

- (8) maaken Nome-emeng
 [...kəno:m...]
 maa-ken Nome-meng
 here(DA:E)-MD Nome-MDs
 'from Nome' (NBK/1-72)

naghuyam maniga
 [...ama...]
 naghuya-m manig-(ng)a
 seagull-RLs egg-AB(3s-s)
 'the seagull's egg' (KRAa-50)

The near-homorganic sequence /kq/ is also not allowed in CSY word-internal phonotactics, and is also a problem when it occurs at the boundary of a word and enclitic, in particular when one of the particles *aatak* 'do it', *iitek* 'but', *qayughllak* 'because', *qesik* 'but' is followed by *=qun* 'I'm telling you; see!'. Some speakers, including many younger ones (both on SLI and in the SFE), solve this problem by reducing /kq/ to /q/, thereby applying what can be considered a degemination rule if one ignores the difference between velar and postvelar points of articulation. Examples are

- (9) *aataqun* (NBK/5-33; BAb-44)
iitequn (NBK/1-69)
qesiqun (RUa-295; MEc-219, 270; BAb-184)

Others, apparently older speakers on SLI and many in the SFE, pronounce final [k] as [x], thus in effect dissimilating the manner of articulation. I also hear a regressive assimilation of the point of articulation, but the spellings in Badten et al. (1987) and in Soviet materials do not show this change. One would expect it to occur, however, since [χq] is a phonotactically permissible sequence, but not [xq]. Examples are

- (10) *aatagqun* (MEc-207, 261, 271; RUa-97)
iiteghqun (PF); but:
iitegqun (RUa-178; BAb-83)
qayughllagqun (MEd-129)

Apparently, most older speakers on SLI do not modify the sequence, but make it easier to pronounce by pronouncing the /k/ with an fricative release, thus as a light affricate. Examples are

- (11) *aatakqun* (NBK/6-29; NBK/8-3; BAb-44)
iitekqun (PF; BAb-83)
qayughllakqun (JAa-249)
qesikqun [qəstik^hqun] (8-5; PF; BAb-184)

The type of hesitation described above illustrates well the status of enclitics as elements participating both to the word-internal and the word-external phonology.

At enclitic boundaries, there are also cases of regressive voice assimilation caused on a word-final coronal obstruent (/t/ and /tʰ/ [in loanwords from Chukchi]) by

a nasal initial enclitic, accompanied by nasal assimilation if the final obstruent is /t/.¹
The rule can be written as

$$\text{Rule 4} \quad \left[\begin{array}{l} - \text{vocalic} \\ + \text{consonantal} \\ + \text{coronal} \\ < - \text{lateral} > \end{array} \right] \rightarrow \left[\begin{array}{l} + \text{voiced} \\ < + \text{nasal} > \end{array} \right] / \_ = [+ \text{nasal}]$$

Examples with final /t/ are:

- (12) qemalngam
qemall=ngam
at last-then
'consequently' (PF; RUa-290; BAb-181)

arekulnguq
arekull=nguq
evidently-it is said
'but it had already happened' (SL-9; BAb-43)

e'lngaatalnguq
e'lngaatal=nguq
really-it is said
'really, it is said' (AN-14, 15)

repalnguq
repall=nguq
so much so-it is said
'so much so, it is said' (SLd-30)

Examples with final /t/ are:

¹ /t/ as well as its voiced counterpart /d/ are counted as obstruents, since they are phonetically fricative, as well as fricatives in phonological function.

- (13) *anaanaghllagpunmi*
anaana-ghllag-put=mi
 aunt-big.N-AB(1p-s)-what.about
 'isn't that our big old aunty' (SLb-9, 10)

tamaakunngam
tamaa-ku-t=ngam
 there(D:E)-PL-ABp-then
 'those, then' (APc-22)

ipegllagennguq
ipeg-ghllag-t=nguq
 be.sharp-really.V-ABp-it.is.said
 'they are real sharp, it is said' (NBK/5-39)

qafsinwaannguq
qafsine-(ng)u-at=nguq
 how.many-be.N-INT(3p)-it.is.said
 'how many, it is said?' (NBK/7-51)

qenwannguq
qenwat=nguq
 finally-it.is.said
 'finally, it is said' (SLd-12; SLc-2, 5; SL-15; SLb-2)

Rule 4 does not apply between word boundaries, and is apparently not obligatory, as shown in the following examples:

- (14) *arekullnguq* (SL-9)
eIngaatallnguq (SEP-9)
repallnguq (SLc-1; SL-8)

tengegkayugetnguq
tenge-kayug-t=nguq
 fly-able.to.V-ABp-it.is.said
 'they can fly, it is said' (NBK/5-40)

It might be significant that the preceding example was said by a seven-year-old. One might, however, expect some variation even among adults, since there are no phonotactic constraints against sequences like /ɲ/ or /ŋ/.

When an enclitic follows the rare cases of word final /s/ in the language, voicing does not occur either, as shown in 15.

- (15) enmisnguq
 enmis=nguq
 already-it.is.said
 'already! it is said' (SLc-105)

A second type of regressive voice assimilation occurs when these same nasal initial enclitics occur after the back obstruents (/k/ and /q/). Here, fricativization occurs together with voicing. Since almost all noun and verb bases and derivational postbases that end in a surface /k/ or /q/ have an underlying form ending in the corresponding voiced fricative (which then becomes a voiceless stop by a late and general rule applying to the end of words), it would be tempting to assume that the enclitic attaches directly to the underlying form and that no assimilation rule exists. However, the change also occurs with words that certainly never had an underlying form in a voiced fricative, such as loans from Chukchi (see *enraq* and *iitek* in the examples below), so the rule is preferable.² It can be written as

$$\text{Rule 5} \quad \left[\begin{array}{l} - \text{vocalic} \\ + \text{consonantal} \\ + \text{back} \end{array} \right] \rightarrow \left[\begin{array}{l} + \text{voice} \\ + \text{continuant} \end{array} \right] / \_ = [+ \text{nasal}]$$

Examples with word final /k/ are

² It is, of course, possible to assume that such loans were given an underlying form with a fricative by analogy. This process seems to have actually occurred in Sirenikski, where the two words have become [ənráχ] and [ítəχ] (Menovshchikov 1964:104, 202, 183), since Sirenikski has a general rule devoicing word-final fricatives (but, conspicuously, no rule making them stops). However, the analogy extends only to absolute word-final position, and actually not to the underlying form, as is shown by the suffixed form [ənráqəm] 'but' (Menovshchikov 1964:104).

- (16) qayughllagmi
 qayugh-ghllag=mi (i.e., qayughllak=mi)
 how-big.N-what.about
 'remember' (JAa-249)

elpegmi
 ell-pek=mi
 PN-AB/RL(2s)-what.about
 'what about you?' (SL-26)

elpegngam
 ell-pek=ngam
 PN-AB/RL(2s)-then
 'you, then' (KAa-34)

iitegngam
 iitek=ngam
 but-then
 'usually; always; anyway' (NBK/8-3; PF; AN-17, 22; APc-94, 111, 112;
 BAb-83)

iitegnguq
 iitek=nguq
 but-it.is.said
 'but, it is said' (KAa-51; PU-27)

kaasalghiimegnguq
 kaate-yalghiimek=nguq
 arrive-IPO(3d)-it.is.said
 'when they arrived there, it is said' (SEP-7)

yuugnguq
 yug-Ø=nguq (i.e., yuuk=nguq)
 man-ABs-it.is.said
 'a man, it is said' (NBK/7-1)

Examples with word-final /q/ are

- (17) qayughmi
 qayugh=mi (i.e., qayuq=mi)
 how-what.about
 'how then?' (NBK/7-2; NBK/8-30; NBK/10-37; SLe-38; BAb-179)

enraghngam
 enraq=ngam
 but-then
 'but then' (APc-82, 220)

tawatenginaghngam
 tawa-ten-(ng)inagh*=ngam (i.e., tawatenginaq=ngam)
 there(DA:R)-EQ-only-then
 'only that, then' (SI-54)

enraghnguq
 enraq=nguq
 but-it.is.said
 'but, it is said' (SLd-13; SLe-15, 16)

mekelghiihghagnguq
 mekelghiih-ghhagh*-Ø=nguq (i.e., mekelghiihhaq=nguq)
 boy-little.N-ABs-it.is.said
 'a little boy, it is said' (NBK/5a-37)

qavngaghnguq
 qavngagh=nguq (i.e., qavnga=nguq)
 when-it.is.said
 'when, it is said' (NBK/7-49)

tuqullghitughnguq
 tuqu-llghit^oe-uq=nguq
 die-NEG-IND(3s)-it is said
 'he hasn't died, it is said' (HEN-7)

One enclitic, =Vy, lengthens the last vowel of the word it attaches to (if it is not already long) and, if there is a word-final consonant, causes its deletion. Because this is unique phonology, one could argue that there is no evidence that this element is not

a postbase or an inflectional ending. However, enclitics should not be defined only as elements with a distinctive phonology; they also have a distinctive distribution, which parallels that of independent particles. =Vy is definitely postinflectional, and therefore cannot be an inflectional ending. Unlike the postinflectional postbases treated in chapter 3, it can occur with every major word class of the language, like a particle. From the point of view of its distribution, therefore, =Vy is clearly an enclitic. Examples are

- (18) apaay
 apa-Ø=Vy
 grandfather-ABs-VOC
 'grandpa!' (NBK/5a-41, 43; NBK/7-8', sqq.; SLd-14, 15, 16; BAa-70)

qamaay
 qama=Vy
 in(DA:O)-VOC
 'you in there!' (NBK/Ø-18; SLc-41; BAa-38, 39)

aghnaqlwaay
 aghnaqlwaagh-Ø=Vy
 old.woman-ABs-VOC
 'old woman!' (BAa-54)

kaviighhaay
 kaviigh-ghhagh*-Ø=Vy
 fox-little.N-ABs-VOC
 'little fox!' (NBK/5-48; BAa-64, 65)

Naghuuy
 Naghuy=Vy
 'Naghuy!'
 (woman's name, hypocoristic for Naghuya, lit., 'seagull')-VOC (o)

In one case I heard this enclitic as an infix:

- (19) meteghlluuyk
 meteghllug-Ø=Vy
 raven-ABS-VOC
 'raven!' (NBK/5-50)

This was certainly a performance error for the regularly occurring *meteghlluuy*.

In conclusion, it appears that the CSY enclitics have a distinctive phonology, even though some of it is very reminiscent of fast speech phonology. In a framework of level-ordered or lexical phonology, the phonology of enclitics can be considered to take place at its own postlexical level. This postlexical level would thus be distinct from the postlexical level for fast speech phenomena. In an autolexical framework, these enclitics would be at the most cliticlike end of the clitic cline, and would have their own *enclitic phonology* level in the phonological representation, located higher than and distinct from the *postinflectional phonology* level set up in chapter 3. They would be considered affixes in the morphological representation and separate particles in the syntactic representation (cf. chapter 3, subsection 3.3.1 for a more extensive discussion of the frameworks of lexical phonology and autolexical syntax).

4.2. The Function and Distribution of CSY Enclitics

4.2.1. Individual Discussion of CSY Enclitics

=lli. This enclitic does not occur in Menovshchikov's description (1967:254), and I have not encountered it in any of the other Soviet materials I scanned. So there is a possibility that this enclitic does not exist in the SFE variety of CSY. It is used in conversation only, and also when talking to oneself, and indicates that the speaker is searching his or her memory for what he or she should say next, or should know, and is requesting the hearer's assistance. An informal translation would be 'let me remember', 'let's say', or 'how/what/when/where/who/why... again?'. It is also used when an adult quizzes a small child about something known to the adult that the child is expected to know. It is always attached to the first word of a clause, which is often an interrogative word itself. Examples:

- (20) Kinangaawalli sister-nga?
 ki-na-ngagh-(ng)u-a=lli sister-(ng)a
 who-na-?-be.N-INT(3s)-again (English)-AB(3s-s)
 'Who was her sister?' (question)

Quyalaaq.
 quyalaaq-Ø
 Quyalaaq-ABs
 'Quyalaaq.' (answer) (NBK/7-57)

- (21) Goldilocksli navek pikaawa?
 Goldilocks-Ø=lli na-vek pi-kau-a
 (English)-ABs-again where-TM go-PST-INT(3s)
 'And where did Goldilocks go?' (a mother asking her five- and seven-year-olds about the story of Goldilocks) (NBK/5-74)

- (22) Natetalli?
 natet⁰e-a=lli
 be.how-INT(3s)-again
 'What was it again?' (said in the middle of a traditional story, trying to remember what is supposed to follow) (NBK/7-31; SEP-7)

- (23) Naawalli?
 na-(ng)u-a=lli
 where-be.N-INT(3s)-again
 'Where was it again?' (same context as above) (NBK/5-75)

- (24) Qafsinayawaatli kurugaat ungipaghaghmi?
 qafsina-yag-(ng)u-at=lli kurugagh*-t ungipaghagh*-mi
 how.many-many.N-be.N-INT(3p)-again pig-ABp story-LCs
 'How many pigs were there in the story?' (a mother asking her five- and seven-year-olds about the story of the Three Little Pigs)

Pingayut!
 pingayug-t
 three-ABp
 'Three!' (answer)

Sakaawatli?
 sa-kau-at=lli
 do-PST-INT(3p)-again
 'What did they do?' (question)

Mangteghangllaq.
 mangteghagh-ngllagh-Ø
 house-make.N-ABs
 'Make a house. (answer) (NBK/5-72)

- (25) Pellaghyugtunga, sanganlli wiin pizikun.
 pellaghyug-tunga, sa-ngan=lli wiin pi-zikun
 be.lonely-IND(1s) do-CQO(3s)-again not.yet do-INT(1s-3s)
 'I'm lonesome, I shouldn't do this too soon (lit., Why don't I do it yet?)'
 (SLa-30)

- (26) Sangaawalli?
 sangagh-(ng)u-a=lli
 what-be.N-INT(3s)-again
 'What was it again?' (NBK/1-66, 76; NBK/5-75)

=lli has an etymon in common Eskimo (Fortescue 1985:218); cognates have been found for Nauk. (Menovshchikov 1975:310, 311) and Imakl. (Menovshchikov 1980:174, 175, 185).

=llu. This enclitic is very common in conversation and narrative, and has two main functions. Its first function is that of a sentence focus particle with the meaning 'also', 'too', or 'even'. I use Jackendoff's (1972:230) definition of focus of a sentence as denoting the information in the sentence that the speaker assumes the hearer does not know. The focus particle can attach to any CSY word class and to any word of the sentence. Focusing =llu occurs as an idiomatic component in several sentence particles, which is given in chapter 6.

The second function of =llu is that of a coordinating particle, with most often a conjunctive meaning 'and', but sometimes a disjunctive one 'or', and then more often an inclusive one 'and, or', but sometimes even an exclusive one 'either... or...'. The precise interpretation can usually be obtained from the context. Coordinating =llu is in no case mutually exclusive with the other coordinating particles in the language. Their relationship is discussed in chapter 6. Like the focus particle, the coordinating particle can attach to any CSY word class. It can also be added to a noun phrase, in which case it attaches to the first word of the phrase.

The following elicited sentences illustrate the use of the focus particle with various elements of the clause:

- (27) John-emllu tuunkaqaa bicycle-egneng panini.
 John-m=llu tuune-kaqe-aa bicycle-gneng panig-ni
 John-RLs-also give-PST-IND(3s-3s) (English)-MDd daughter-AB(3Rs-s)
 Even John_i gave his_i daughter a bicycle.

John-em paninillu tuunkaqaa bicycle-egneng.
 John_i gave even his_i daughter a bicycle.

John-em panini bicycle-egnengllu tuunkaqaa.
 John_i gave his_i daughter even a bicycle.

John-em panigmineng tuunkaqaklu bicycle-egni.
 John-m panig-mineng tuune-kaqe-ak=llu bicycle-gni
 John-RLs daughter-MD(3Rs-s) give-PST-IND(3s-3d)-also (English)-
 AB(3Rs-d)
 John_i even gave his_i daughter his_i bicycle.

John-em bicycle-egnillu tuunkaqak panigmineng.
 John_i gave his_i daughter even his_i bicycle. (NBK/10-16)

In the two last examples of the series, the sentences were modified in order to point out that the bicycle involved is John's own bicycle. The consultant found it easier to focus =llu on the verb 'to give' and on the bicycle after making this modification, probably because the act of giving away one's own possession (especially as expensive an object as a bicycle) is more surprising and unexpected and therefore more likely to be put in focus.

Examples of focusing =llu with various word classes, phrases, and clauses in nonelicited sentences are

- (28) With a noun:

Mommy-llu naghaaghaquq.
 Mommy-Ø=llu naghaagh-naqe-uq
 (English)-ABs-also play-PROSP-IND(3s)
 'Mommy is going to play too.' (NBK/5-27)

Igaqanki iitek ilankallu?
 igaqe-anki iitek ila-nka=llu
 photograph-INT(3p-3p) at.least some.of-AB(1s-p)-also
 'Did they at least take pictures of others too?' (NBK/7-58)

- (29) With a demonstrative:

Ukuklu anglisaghnaqagka.
 u-ku-k=llu angli-sagh-naqe-agka
 here(D:R)-PL-ABd-also grow-CAUS-PROSP-IND(1s-3d)
 'I'm going to make these bigger too.' (child playing with modeling clay)
 (NBK/5-34)

- (30) With independent pronouns:

Whangallu liinnaqnaqunga. (or:) Liinnaqnaqunga whangallu.
 whanga-Ø=llu liinnaqe-naqe-unga
 PN1-ABs-also study-PROSP-IND(1s)
 'I am going to study also.' (NBK/7-21; NBK/10-37)

Tagilanga whangallu?
 tagi-langa whanga-Ø=llu
 come-OPT(1s) PN1-ABs-also
 'May I come with you?' (NBK/10-38)

Uhuk, elpeklu qetgeghi.
 uhuk ell-pek=llu qetgegh-i
 now! PN-AB(2s)-also jump-OPT(2s)
 'Now you go and jump' (said after speaker has already jumped). (SEP-11)

Maligгнаqamken elpeklu.
 maligte-naqe-amken ell-pek=llu
 go.with-PROSP-IND(1s-2s) PN-AB(2s)-also
 'I'll go with you.' (HEN-20)

Negpenun Kuusmeyaghileqsin?
 ne-gpenun Kuusme-yagh-lleqe-zin
 home-TM(2s-s) Christmas-go.for.N-FUT-INT(2s)
 'Are you going home during Christmas?' (question)

Aa-a, elpeklu? (or:) elpek? [pã:k]³
 aa-a ell-pek=llu
 yes PN-AB(2s)-also
 'Yes, what about you?' (answer) (NBK/7-24; NBK/10-40)

Igaghyugllak ellngallu.
 igagh-yug-ghllag- ell-(ng)a=llu
 tattoo-want.V-V.a.lot- PN-AB(3s)-also
 'She wants very much to be tattooed also' (said to a woman with a tattoo).
 (NBK/7-58)

Ungleghyayek, ellngallu neghumalghii.
 unglegh-yayek, ell-(ng)a=llu negh-(i/u)ma-lghii
 nestle.down-CQO(3d) PN-AB(3s)-also eat-PST-INP(3s)
 'When they (two reindeer that finished eating) lay down, she ate also.'
 (NBK/6-33)

(31) With verbs:

Church-elleqallu?
 church-e-lleqe-a=llu
 (English)-FUT-INT(3s)-also
 'Will there be church services also?' (HEN-9)

Una veglluk peghhiisiiwallu?
 u-na-Ø vegllug-Ø peghhigh-(u)sigh-(ng)u-a=llu
 here(D:R)-na-ABs towel-ABs wash.hands-device.for.V-ing-be.N-INT(3s)-
 also
 'Is this towel for handwashing too?' (BAb-151)

³ An equivalent of the focus enclitic can be to pronounce *elpek* with an overlong final vowel and a falling-rising intonation.

When the enclitic is attached to a clause that is one word long, it is not necessarily clear without the context what element is being focused in it:

- (32) Hatband-engllaghnaqaqallu.
 hatband-e-ngllagh-naqe-aqa=llu
 (English)-make.N-PROSP-IND(1s-3s)-also
 'I'm going to make a hatband for this one too.' (NBK/5-34)

In other contexts, the above could also be used in the following senses:

- (33) 'I'm going to also make a hatband for him.' (focus on "make")
 'I'm going to make also a hatband for him.' (focus on "hatband")

The enclitic can also focus on a whole clause, in which case it attaches to the first word of that clause. Again, when that clause is only one word long, it is not always clear without the context that it is the clause itself that is being focused on and not some element within that clause. Examples with four different verb moods occur in my data.

- (34) With a clause in the IND mood:

Kaasaghtughaquqlu nagaquutuq aynganangameng.
 kaate-yaghtugh-aqe-uq=llu nagaqugh-(u)te-uq ayngananga-meng
 arrive-about.to.V-PROG-IND(3s)-also hear-HALF.TR-IND(3s)
 musical.instrument-MD(3s)
 'As he came near he heard music.' (NBK/4-50)

- (35) With a clause in the APO mood:

Kiiwegni taakwani asivani unangniighnaluni piiquq negaghpanillu
 siifnaluku.
 kiiw-gni taakwa-ni asivagh-ni unange-niigh-na-luni pi-aqe-uq negaghpag-
 ni=llu siifte-na-luku
 river-LC(d) approaching(DA)-LC northeast(LCd) hunt-
 V.as.a.specialized.activity-in.order.to.V-APO(3s) do-PROG-IND(3s)
 fishnet-AB(3Rs-s)-also set.a.net-in.order.to.V-APO(3p-3s)
 'He wanted to do some hunting downriver and also set a net.' (HEN-21)

Vek palinghani piginghuluku saghnaaqegkangat, vegllugulukullu.
 veg-Ø paligh-negh-(ng)ani piginegh-(ng)u-luku saghna-aqe-kangat
 vegllug-(ng)u-luku=llu
 grass turn.to.autumn.colors-act.of.V-ing-LC(3s-s) insole-be.N-APO(3p-3s)
 gather-PROG-TRP(3p-3s) towel-be.N-APO(3p-3s)-also
 'When the grass is ripe or not green anymore, they picked it for insoles and
 for towels.' (SI-174)

- (36) With a clause in the C1O mood:

Neghigluku nanghiighutaelghiit kilgaani esghaatuunneghmeggni,
 allakutuunneghmeggnullu.
 neghig-luku nanghiigh-(u)te-aqe-lghiit kilgaa-ni esghagh-(u)te-(t)uute-
 neghmeggni allake-(u)te-(t)uute-neghmeggni=llu
 have.happened.long.ago-APO(3s-3s) try-V.each.other-PROG-INP(3p)
 wilderness-LCP see-V.each.other-V.together-C1O(3Rp) differ-
 V.each.other-V.together-C1O(3Rp)-also
 'Long ago the men would challenge each other when they met out in the
 wilderness, especially when they were from a different place.' (SI-111)

- (37) With a clause in the C2O mood:

Maklagtengnginaneghmeggnullu laagmegteggun kapughaelghiit.
 maklag-te-(ng)inaneghmeggni=llu laag-megteggun kapugh-aqe-lghiit
 bearded.seal-catch.N-C2O(3Rp)-also joint-VL(3Rp-p) tattoo-PROG-
 INP(3p)
 'Also only when they get a bearded seal they tattoo their joints.' (NBK/7-49)

It is apparently possible to have more than one focusing particle in one clause. My impression is that such sentences are not entirely well formed and that the speaker has been changing his or her mind on what should be the focus during the production of the utterance:

- (38) Piitesighaghvigmillu John atightughaguqlu comic-book-meng.
 piitesighagh-vig-mi=llu John-Ø atightugh-aqe-uq=llu comic-book-meng
 flower-place.of.N-LCs-also John-ABs read-PROG-IND(3s)-also
 (English)-MD(3s)
 'Even in the garden John reads comic books.' (NBK/10-17)

In such cases, the distinction between focusing and coordinating *=llu* can become hazy, as in the following example uttered by a five-year-old making figurines in modeling clay:

- (39) Daddy-llu pingllaghlleqaqa, Mommy-llu,... Ulaaplu.
 Daddy-Ø=llu pi-ngllagh-lleqe-aqa Mommy-Ø=llu Ulaap-Ø=llu
 (English)-ABs-also something-make.N-FUT-IND(1s-3s) (English)-ABs-
 also Ulaputagh-ABs-also
 'I will make Daddy too, and Mommy,... and Ulaap. (NBK/5-32)

It is possible that cases like the above could have evolved into the type of coordination without verb agreement discussed for example 50.

A coordinating *=llu* generally occurs attached to every conjoined element of the clause.

- (40) With two nouns:

Naakallu atakallu kaatuk.
 naa-ka=llu ata-ka=llu kaate-uk
 mother-AB(1s-s) father-AB(1s-s) arrive-IND(3d)
 'My mother and my father arrived.' (NBK/4-16)

- (41) With two independent pronouns:

Naangan ellngallu whangallu meghtiisqiinkung.
 Naa-(ng)an ell-(ng)a=llu whanga-Ø=llu meghtagh-sqe-iinkung
 mother-RL(3s-s) PN-AB(3s)-also PN1-ABs-also get.water-want.one.to.V-
 IND(3s-1d)
 'His mother wanted him/her and me to get water.' (SI-47)

- (42) With two adverbial elements:

Whanga piyukaqa atunem liiskumta Laluramkestunllu, whangkutestunllu.
 whanga-Ø piyuke-aqa atunem liite-kumta Laluramke-stun=llu whang-kute-
 stun=llu
 PN1-ABs want-IND(1s-3s) together learn-CDO(1p) English-EQp-also
 PN1-PL-EQp-also
 'I prefer learning English and Yupik together.' (NBK/6-51)

- (43) With two verbs:

Ulluviiq taana pateghtuuqlu, umuuqlu.
 ulluviigh-Ø taa-na-Ø pateghtu-uq=llu umu-uq=llu
 board-ABs there(D:R)-na-ABs be.wide-IND(3s)-also be.thick-IND(3s)-
 also
 'That board is wide and thick.' (BAb-150)

- (44) With five nouns:

Sighineghmiitlu, Imtugmiitlu, Avatmiitlu, Ungazighmiitlu,
 Napaqutaghmiitlu ataasiq ulu.
 Sighinegh-mii-t=llu Imtug-mii-t=llu Avate-mii-t=llu Ungazigh-mii-t=llu
 Napaqutagh-mii-t=llu ataasigh-Ø ulu-Ø
 Sirenik-people.of.N-ABp-also Imtuk-people.of.N-ABp-also Avan-
 people.of.N-ABp-also Chaplino-people.of.N-ABp-also Napakutak-
 people.of.N-ABp-also one-ABs tongue-ABs
 'The people of Sirenik, Imtuk, Avan, Chaplino, and Napakutak (have) one
 language.' (OT-14)

- (45) With three nouns:

Naanganllu, nayaganllu, nulighhanllu sanaghsimakangit.
 naa-ngan=llu nayag-(ng)an=llu nulighh-(ng)an=llu sanaghte-(i/u)ma-kangit
 mother-RL(3s-s)-also sister-RL(3s-s)-also wife-RL(3s-s)-also process-
 PST-TRP(3p-3p)
 'His mother, his sister, and his wife were processing them (skins).' (BAa-
 47)

- (46) With five noun phrases:

Nunallu una, unguvalleqllu, tuqulleqllu, sangwaallu alngunak
 kiyaghtaalleghmelnguq maaten, sangwaallu alngunak kaasaghqaq,
 qamagtengngwaaghluki elpesi pikasi.
 nuna-Ø=llu u-na-Ø unguva-llegh-Ø=llu tuqu-llegh-Ø=llu sangwaa-Ø=llu
 alngunak kiyaghtaa-llegh-mi-et⁰e-ngugh*-Ø maaten sangwaa-Ø=llu
 alngunak kaate-yaghqagh-Ø qamagte-(ng/w)aagh-luki ell-pesi pi-ke-asi
 land-ABs-also here(D:R)-na-ABs be.alive-act.of.V-ing-ABs-also die-
 act.of.V-ing-ABs-also something-ABs-also any be.present-act.of.V-
 ing-LCs-be.N-INP-ABs now something-ABs-also any arrive-
 N.that.will.V-ABs complete-completely.V-APO(3p-3p) PN-RL(2p)
 something-have.as.N-IND(2p-3p)
 'This world, life and death, the present, and the future -- all these are yours.'
 (NBK/9-68)

It is sometimes the case that only the last element of a series occurs with =llu.

- (47) Neghelta manigmengllu neqekragmengllu. (or.)
 Neghelta manigmeng neqekragmengllu.
 negh(e)-lta manig-meng(=llu) neqekrag-meng=llu
 eat-OPT(1p) egg-MDs(-also) pilot.bread-MDs-also
 'Let's eat eggs and pilot bread.' (NBK/4-14)

Tamaaken, kufimeng, qayumeng, caribou-meng neqanganeng
 ilanganengllu.
 tamaa-ken kufi-meng qayugh-meng caribou-meng neqa-(ng)aneng ila-
 (ng)aneng=llu
 there(DA:E) coffee-MDs hot.drink-MDs (English)-MDs food-MD(3s-s)
 other-MD(3s-s)-also
 'Some coffee, tea, caribou meat and other things.' (HEN-10)

Sameng qayughyugsin, qayupigmeng kufimengllu?
 sa-meng qayugh-yug-zin, qayugh-pig-meng kufi-meng=llu
 what-MDs drink-want.to.V-INT(2s) hot.drink-genuine.N-MDs coffee-
 MDs-also
 'What do you want to drink, tea or coffee?' (NBK/Ø-37)

The following are examples of the disjunctive use of *=llu*. In the exclusive disjunctive sense, most clearly shown in sentences starting with the noun *naligh* 'which one?', both elements of the disjunction must contain *=llu*:

- (48) *Naliq piyugsigu, qayuqlu, kufillu?*
naligh-Ø pi-yug-zigu qayugh-Ø=llu kufi-Ø=llu
 which-ABs do-want.to.V-INT(2s-3s) hot.drink-ABs-also coffee-ABs-also
 'Which do you prefer, tea or coffee?' (NBK/Ø-52)

Nalighmeng neghnaqesta, kayumengllu, neghsamengllu?
naligh-meng negh-naqe-sta kayu-meng=llu neghsagh-meng=llu
 which-MDs eat-PROSP-INT(1p) fish-MDs-also seal-MDs-also
 'Which will we eat, fish or seal?' (JAA-163)

Nani imani ulimaaghaat, ayguvaqanillu tesamanillu uqevaqani?
na-ni ima-ni ulimaagh-(ng)u-at aygugh-vagh-kagh-ni=llu tesama-ni=llu
uqegh-vagh-kagh-ni
 where-LC here(DA:O)-LC something.made-be.N-INT(3p) north-
 go.toward.N-one.that.has.V-ed-LCp-also down(DA:O)-LC-also south-
 go.N-wards-one.that.has.V-ed-LCp
 'Where are they made anyway (radio broadcasts), a little bit further north, or
 down further south?' (NBK/1-69, 70)

Ililquq una saam pikagu, nanuumllu, neghsamllu?
ililqugh-Ø u-na-Ø sa-m pi-ke-agu nanugh-m=llu, neghsagh-m=llu*
 brain-ABshere(D:R)-na-ABs something-RLs something-have.as.N-INT(3s-
 3s) polar.bear-RLs-also seal-RLs-also
 'Is this a polar bear's brain or a seal's brain?' (APA-10)

Salin ataasighsigatunga pillesqingallu, maanlleqsingallu.
*salin ataasighte-(ng)igat^oe-unga pi-lleqe-zinga=llu maa-ni-et^oe-lleqe-
 zinga=llu*
 yet make.up.one's.mind-never.V-IND(1s) go-FUT-INT(1s)-also
 here(DA:E)-LC-be.N-FUT-INT(1s)-also
 'I can't make up my mind whether I want to go home or stay here.' (NBK/7-
 24)

(...) tallimawaatlu aghvinlewaatlu naalkapung (...)
 tallimag-(ng)u-at=llu aghvinleg-(ng)u-at=llu naalke-apung
 five-be.N-INT(3p)-also six-be.N-INT(3p)-also find-IND(1d-3p)
 '(...) we found five? or six? (eggs...)' (NBK/4-70)

It is also possible that one of the conjoined items occurs as a pronominal element marked by the verb inflection only; in this case, one coordinating enclitic must be present on the other, morphologically independent element. This particular case is evidence that a CSY verb inflection can form one higher NP together with a coordinated exterior NP which has an affixed =llu. Examples are

- (49) Kinallu igleghtestagnekek ullghitak?
 ki-na-Ø=llu igleghte-(te)ste-agnekek ullghitagh-k
 who-na-ABs-also travel-CAUS-INT(3d-3d) car-ABd
 'Who and you started the car?' (NBK/7-23; NBK/10-39)

Mekeneghsillu yataaghqumalutung nulughyaghnalutung, (...)
 Mekeneghsi-Ø=llu yataaghqe-(i/u)ma-lutung nulugh-yagh-na-lutung
 Mekeneghsi-ABs-also get.ready-PST-APO(1d) fish-go.V-in.order.to.V-
 APO(1d)
 'Mekeneghsi and I were getting ready to go fishing, (...)' (NBK/5-56)

On the other hand, there are some cases in my corpus where the number agreement on the verb is different from what one would expect. One can have singular subject agreement, where a dual is expected since the argument consists of two coordinated singular items.

- (50) With two nouns:

Tugugu igaghyaghqaqlu, igaasiqlu.
 tugu-gu igagh-yaghqagh-Ø=llu, igaasigh-Ø=llu
 take-OPT(2s-3s) write-something.for.V-ing-ABs-also pencil-ABs-also
 'Pick up the paper and the pencil.' (MET-2)

- (51) With one noun and an interrogative pronoun:

Kinkungwaa nanevgaqlu aghnalqwaqlu?
 ki-nku-(ng)u-a nanevgagh-Ø=llu aghnalqwaagh-Ø=llu
 who-PL-be.N-INT(3s) old.man-ABs-also old.woman-ABs-also
 'Who are that old man and old woman?' (NBK/4-22)

There can also be plural agreement on the verb where a dual would be expected.

- (52) With two nouns:

Maani iqalliniilleqlu unangiilleqlu unange-niigh-llegh-Ø=llu
 pinighataghaghtuk (or more commonly used:) pinighataghaghtut.
 maa-ni iqalli-niigh-llegh-Ø=llu hunt-habitually.V-act.of.V-ing-ABs-also
 pinigh-ataghagh-tuk pinigh-ataghagh-tut
 here(DA:E)-LC fish-habitually.V-act.of.V-ing-ABs-also be good-more.V-
 IND(3d) be good-more.V-IND(3p)
 'The fishing and hunting is better here.' (HEN-12)

Kelgutiki tungtuvaklu, aghveqlu aghnamun.
 kelgute-iki tungtuvag-Ø=llu aghvegh-Ø=llu aghnagh-mun
 show-OPT(2s-3p) moose-ABs-also whale-ABs-also woman-TMs
 'Show the moose and the whale to the woman.' (MET-6)

- (53) With one noun and one independent pronoun:

Mergallu whangallu piiqngamta (...)
 Merga-Ø=llu whanga-Ø=llu pi-aqe-ngamta (...)
 Merga-ABs-also PN1-ABs-also go-PROG-CQO(1p)
 'When Merga and I went (...)' (NBK/1-75)

Iirgumllu, whangallu taglaataput qamuqluki.
 Iirgu-m=llu whanga-Ø=llu taglagh-(u)te-aput qamugh-ke-luki
 Iirgu-RLs-also PN1-RLs-also go.up-V.with-IND(1p-3p) load-have.as.N-
 APO(1p-3p)
 'Iirgu and I brought it from the shore as a load of meat.' (OT-8)

Note that in the following example, plural agreement is expected since *igat* 'book' is morphologically and inherently plural, even though it is semantically singular:

- (54) Tuguki igaasiqlu, igatlu.
 tugu-ki igaasigh-Ø=llu igagh-t=llu
 take-OPT(2s-3p) pencil-ABs-also design-ABp-also
 'Pick up the pencil and the book.' (MET-2)

Even though some of the above examples might be explained away as performance errors, the fact remains that there is a tendency to avoid using the dual in the verb inflection for agreement with two coordinated elements. An explanation for this, as well as for why either singular or plural agreement is chosen, is not apparent to me. For the cases of singular verb-agreement marking, it would be possible to assume that these actually contain the focus particle twice, since the focus particle has no influence on verb agreement. One could then assume that the coordination has arisen from reinterpreted anomalous sentences of the kind discussed with examples 38 and 39 above. Another possibility would be to assume the existence of two well-formed underlying clauses with *=llu* as a focus particle in each and with a verb deletion in the second clause. This possibility is illustrated with example 50:

Tugugu igaghyaghqaqlu, tugugu igaasiqlu.
 (lit.) 'Pick up the paper also, pick up the pencil also.'

→ Tugugu igaghyaghqaqlu, igaasiqlu.
 (lit.) 'Pick up the paper also, the pencil also.'

This explanation is *ad hoc*, since it trivializes the semantic difference between coordination and focusing, and a reinterpretation of anomalous sentences is certainly preferable. None of these explanations are sufficient, however, since they do not predict plural agreement where dual agreement is expected.

As far as these cases with plural agreement are concerned, it is possible to assume that the speaker had actually more than two coordinated arguments in mind, and takes these into account in the verb agreement. This seems to occur in sentences containing one noun and one independent pronoun such as in 53, where it is clear from the context that there are others, beside the two explicitly given, who participate in the action denoted by the verb. So, the examples in 53 are actually parallel to the ones in 49, and their more precise meanings would be:

'When Merga and I and others went (...)'

'Iirgu and I and others brought (...)'

For some cases, however, as in 52, the assumption that there is a third unexpressed argument cannot be made.

=*llu* has an etymon in common Eskimo (Fortescue 1985:218); cognates have been found for Sir. (Menovshchikov 1964:100, 101, 135, 136), Nauk. (Menovshchikov 1975:325, 343, 358, 364), and Imakl. (Menovshchikov 1980:185, 187).

=*mi*. This enclitic is not given in Menovshchikov (1967:254), but it does occur in texts from the SFE. It is used in conversation only, and can be defined as an attention-shifting particle in that it requests the hearer for comments on a new entity introduced by the speaker. It can be translated as 'what about...?; as for...'. It occurs in idiomatic combinations with several particles, given in chapter 6. It is always attached to the first word of the clause, and this clause often contains an interrogative word and/or a verb in the INT mood. Most often, the verb is inflected for second person subject, since the new entity is most often the hearer himself. Examples are

- (55) Elpegmi kinanguzin?
 ell-pek=mi ki-na-(ng)u-zin
 PN-AB(2s)-what.about who-na-be.N-INT(2s)
 'And you, who are you?' (SL-26)

Nanimi (elpek) qepghaghaqsín?
 na-ni=mi ell-pek qepghagh-aqe-zin
 where-LC-what.about PN-AB(2s) work-PROG-INT(2s)
 'And you, where do you work?' (after answering the question 'Where do you work?') (NBK/7-25; NBK/10-41)

Natenmi unangniighaqsín?
 na-ten=mi unange-niigh-aqe-zin
 what-EQ-what.about hunt-habitually.V-PROG-INT(2s)
 'What about you, how were you hunting?' (HEN-9)

Sanaqsinmi elpek?
 sa-naqe-zin=mi ell-pek
 do-PROSP-INT(2s)-what.about PN-AB(2s)
 'What are you about to do?' (NBK/7-21)

Uvegllukumi sangan tugunanighsigu?
 uvegte-luku=mi sa-ngan tugu-nanigh-zigu
 act.before.something.happens-APO(2s-3s)-what.about do-CQO(3s) take-
 cease.to.V-INT(2s-3s)
 'Why didn't you take it before it happened?' (BAB-252-53)

There is no difference in meaning between =llu with *elpek* in a question (as in the sixth example under 30 above) and =mi with *elpek* (as in the first sentence under 55).

Some cases where =mi does not occur with a second person subject or in an interrogative clause are the following:

- (56) Kinami yugulilleqa?
 ki-na-Ø=mi yuguli-lleqa-a
 who-na-ABs-what.about save-FUT-INT(3s)
 'Who, then, can be saved?' (WY-89)

Samengmi Moses-em liilightughtisi?
 sa-meng=mi Moses-e-m liilightugh-tisi
 what-MDs-what.about Moses-RLs advise-INT(3s-2p)
 (Jesus shifts the attention of the Pharisees, who were asking him a trick question, by answering with a question:) 'What commandment did Moses give you?' (WY-84)

Whangami mughunniightekaghqag.
 whanga-Ø=mi mughute-niigh-(s)te-kaghqagh-Ø
 PN1-ABs-what.about hunt-habitually.V-one.who.Vs-future.N-ABs
 'As for me, I will be a hunter' (BAa-55)

Kaa, anaanaghllagpunmi taakwna.
 kaa anaana-ghllag-put=mi taakw-na-Ø
 oh maternal.aunt-big.N-AB(1p-s)-what.about approaching(D)-na-ABs
 (translation given as:)

- 'Here comes our big kind old aunty.' (SLb-9, 10)
 (but I assume a more literal translation would be:)
 'Oh, how about this! Here comes our big aunty.'

In the literal translation, the *=mi* probably conveys affection toward the person pointed out in this way.

=mi has an etymon in common Eskimo (Fortescue 1985:218); cognates have been found for Sir. (Menovshchikov 1964:192) and Nauk. (Menovshchikov 1975:322).

=ngam. This enclitic is used in conversation only to stress the pertinence of the speaker's utterance, considering the situation or the information just given to the speaker. In statements, it can be translated as 'Well then!'; in questions, as '(How/What/When/Where/Who/Why) is it then that...?'; and in orders or requests as, 'Do it then...!' or 'You really ought to... then.' In questions and in sentences with imperative meaning, it often expresses mild exasperation. Disregarding initial particles or vocatives, this enclitic is always attached to the first word of a clause; it also occurs in idiomatic formations described in chapter 6. Examples in declarative and interrogative sentences are

- (57) With the IND mood:

Entaquun aglaghnaqungangam.
 entaquun aglagh-naqe-unga=ngam
 I.think go.home-PROSP-IND(1s)-then
 'I guess I'll go home then.' (Visiting, and seeing there is nothing else to talk about.) (HEN-24)

- (58) With the INT mood:

Elpeנגam sanguzin?
 ell-pek=ngam sa-(ng)u-zin
 PN-AB(2s)-then what-be.N-INT(2s)
 'And what are you?' (I just told you what I am, and I really want to know what you are [children playing at acting out sea mammals]). (KAa-34)

Naningam aghviginaqsín?
 na-ni=ngam aghvig-i-naqe-zin
 where-LC-then wash-HALF.TR-PROSP-INT(2s)
 'Where will you wash then?' (considering you just told me your washing
 machine is broken). (HEN-19)

Natenngam tagizin?
 na-ten=ngam tagi-zin
 what-EQ-then come-INT(2s)
 'How then did you get here?' (considering you just told me your
 snowmachine is broken). (NBK/4-68)

Enkaam qakunngam tagilleqsín sakmaken?
 enkaam qakun=ngam tagi-lleqe-zin sakma-ken
 then when-then come-FUT-INT(2s) down(DA:O)-MD
 'Then, when are you coming back (from Savoonga)?' (you should have told
 me by now). (PF)

Sanaqsingam?
 sa-naqe-zinga=ngam
 do-PROSP-INT(1s)-then
 'What should I do, then?' (WYb-43)

Sangwaangam guututngunaqlaatagha?
 sangwaa-Ø=ngam guutute-(ng)u-naqlaatagh-ta
 what-ABs-then income-be.N-PROSP.again-INT(3s)
 'What are we going to have for our income?' (BAb-65)

In imperative or exhortative sentences, the enclitic can be used with the OPT mood; in such sentences, the idea that some action or object is enough is often expressed, usually with the DA *tawaten* 'like that' or the PT *haam*, *haamangam*, or *ahaamangam* 'enough'. Examples are

- (59) litthingam, ghhuutaaten!
 itegh-i=ngam ghhuute-aaten
 go.in-OPT(2s)-then be.cold-IND(3s-2s)
 'Go in, you're cold!' (it is now time to do this before you freeze). (MEa-257)

Haam, atuqaghlakunngam black-a.
 haam atugh-qagh-lakun=ngam black-e-Ø
 enough use-briefly.V-OPT(1s-3s) (English)-ABs
 'Enough, let me use the black' (two children playing with crayons).
 (NBK/5-28)

Haamangam, tawatenginaghngam pilta.
 haamangam tawa-ten-(ng)inagh=ngam pi-lta
 enough there(DA:R)-EQ-only-then do-OPT(1p)
 'That's enough, let's not take any more.' (SI-54)

The same meanings are also often expressed with forms with a stronger optative or imperative force than the OPT, such as the VV postbase *-lgha-/-gga-* (used with the IND) 'FUTURE OPTATIVE', the VV postbase *-na-* 'FUTURE OPTATIVE' (used with the TRP), or the negative APO with *-gpe-* 'to not V'. Examples are

(60) With *-lgha-/-gga-*:

Apaay, teghtughhaatenngam!
 apa-Ø=Vy teghtugh-gga-uten=ngam
 grandfather-ABs-VOC wake.up-FUTURE.OPTATIVE-IND(2s)-then
 'Grandpa, wake up now!' (NBK/7-10', 14')

Aghnaghaq, makellghaatenngam.
 aghnaghagh*-Ø makete-llgha-uten=ngam
 girl-ABs get.up-FUTURE.OPTATIVE-IND(2s)-then
 'Girl, get up now.' (SLa-37)

(61) With *-na-*:

Aa-a, taaqnakenngam tawaten pineghmeng.
 aa-a taaqe-na-ken=ngam tawa-ten pi-negh-meng
 yes finish-FUTURE.OPTATIVE-TRP(2s-3s)-then there(DA:R)-EQ do-act.of.V-ing-MDs
 'O.K., quit bothering him.' (APc-18)

- (62) With *-gpe-* and the APO mood:

Ahaamangam usigpenasingam.
 ahaamangam usi-gpe-nasi=ngam
 enough load-NEG-APO(2p)-then
 'Do not take any more load because that is enough.' (SI-3)

Whaawha tuunaaten mekestaaghaaghaan qinunaghqegpenangam.
 whaawha tuune-aaten mekestaaghhagh*-(ng)u-ghngaen qinunaghqe-gpe-
 nang=ngam
 at.least give-IND(3s-2s)small.thing-be.N-CSO(3s) fuss-NEG-APO(2s)-
 then
 'At least he has given you some even though it is only a little, so quit
 fussing.' (BAb-259)

For added emphasis, it is possible for *=ngam* to appear twice in the same clause:

- (63) Aghluuy, elpeklungam mughusagutenngam.
 Aghlu-Ø=Vy ell-pek=llu=ngam mughute-yagute-n=ngam
 Aghlu-ABs-VOC PN-AB(2s)-also-then hunt-reach.a.state.of.V-ing-
 OPT(2s)-then
 'Aghlu, you too should go hunt now.' (MEc-257)

Natenngam pinaqangam?
 na-ten=ngam pi-naqe-a=ngam
 what-EQ-then go-PROSP-INT(3s)-then
 'How will he go then?' (PU-15)

=ngam does not appear to have an etymon in common Eskimo; cognates for languages close to CSY have been found only for Nauk. (Menovshchikov 1975:348) and for CAY (Jacobson 1984:620).

=nguq. This enclitic is a quotative evidential, and can usually be translated as 'it is said that...', 'I heard that...', 'let's say that...'. It indicates that the speaker does not assume full responsibility for the information provided, which does not necessarily mean that the speaker is skeptical about it or even that he is not the ultimate source of it. It is most often used in narrative, but also in conversation. Its frequency and

position within the clause vary considerably from speaker to speaker and from style to style. It is attached most often to the first word of a clause, in particular when this word is a particle or DA, but it can occur on other words of a clause, in particular on verbs. Its occurrence with particles is illustrated in chapter 6.

In narratives that are not meant as historical accounts (such as *ungipaghaatet* or traditional tales involving mythical human beings and animals as well as supernatural beings) the presence of this enclitic is obligatory in the two first stereotyped introductory lines. These lines are in the SLI variety, with few deviations:

- (64) *Ungipaghaninguq imani*, followed by either:
Xnguq taana, taakut, or taakuk (depending on the number of main
 protagonists)...
 or: *taananguq, taakunnguq, or taakugnguq* (depending on the number of
 main protagonists) *Y...*
 'In a story long ago, it is said, there was X or Y, it is said...'

At X or Y, there is the name or short mention of the main protagonist(s). Examples are

- (65) *Ungipaghaninguq imani, taananguq yuggaq sikugni.*
ungipaghagh-ni=nguq ima-ni taa-na-Ø=nguq yug-ghhagh-Ø siku-gni*
 story-LCP-it.is.said here(DA:O)-LC there(D:R)-na-ABs-it.is.said man-
 little.N-ABs ice-LCd
 'Once upon a time, there was a man on the ice.' (NBK/9-70)
- Ungipaghaninguq imani, meteghllugllagnguq taana, estaaghaamalghii.*
ungipaghagh-ni=nguq ima-ni meteghllug-ghllag-Ø=nguq taa-na-Ø
estaaghagh-(i/u)ma-lghii
 story-LCP-it.is.said here(DA:O)-LC raven-big.N-ABs-it.is.said there(D:R)-
 na-ABs slide-PST-INP(3s)
 'Once upon a time, there was a big raven, who was sliding.' (NBK/7-28)

These are the only two *=nguq* that are practically obligatory in an *ungipaghaan*. In the remainder of the story, the amount of quotative enclitics varies for reasons that are not always clear. As in CAY, for some storytellers at least, *=nguq* is used for marking off sections of the tale as discourse units for which there is also prosodic evidence (Woodbury 1983:2). It seems, however, that their number increases if the storyteller is unsure of his or her memory. In one story told by a very self-confident

speaker, only the two enclitics referred to above were present. In another story, where an older speaker seemed to have not told the story in a long time, out of the 548 words of the story, 79, or 13.41%, occurred with an attached =*nguq*, and in a story told by a younger speaker who had just recently memorized it, 30 out of a total of 144 words, or 20.83%, had an attached =*nguq*.

An example of the multiple use of =*nguq* in the body of an *ungipaghaan* is

- (66) Piyaqminigunguq iqelqwakunnguq kiliimakanga. Paaghyaqminigunguq
kililleni taana avangitaa, maamughnguq iqelqwa.
pi-yaqminigu=*nguq* iqelqugh-(ng)akun=*nguq* kiligh-(i/u)ma-kanga paagh-
yaqminigu=*nguq* kiligh-llegh-ni taa-na-Ø avangit^oe-aa, maame-
uq=*nguq* iqelqugh-(ng)a
do-TPO(3Rs-s)-it.is.said little.finger-VL(3s-s)-it.is.said cut-PST-TRP(3s-
3s) lick-TPO(3Rs-s)-it.is.said cut-result.of.V-ing-AB(3Rs-s)
there(D:R)-na-ABs disappear-IND(3s-3s) heal-IND(3s)-it.is.said
little.finger-AB(3s-s)
'She saw she cut her little finger. And she licked the cut, and her little finger
was healed.' (SEP-6, 7)

In the SFE, *ungipaghaatet* begin with

- (67) Iimnanguq.
iim-na-Ø=*nguq*
here(D:O)-na-ABs-it.is.said
'Long ago, it is said.' (RU; BAa-passim)

In the stories of Rubtsova's 1954 collection, occurrences of the quotative enclitic are rare beyond the first line given above, but I doubt this is significant, since these "superfluous" enclitics could have been edited out.

The following examples of =*nguq* are from autobiographical accounts:

- (68) Tamaaninguq Sivungaq neqmeng akluniisaghtuq, (...)
tamaa-ni=*nguq* Sivungagh-Ø neqe-meng aklunagh-(ng)it^oe-yagh-tuq
there(DA:E)-LC-it.is.said Savoonga-ABs food-MDs be.scarse-NEG-
V.in.vain-IND(3s)
'In those days, Savoonga never used to lack food.' (NBK/8-72)

Kelgutnguŋtunnguq Kiyaghneghmun nusunghata aga aghveqluki.
 kelgute-(ng)u-fte-ut=nguq Kiyaghnegh-mun nusug-neghata aga aghvegh-
 ke-luki
 reveal-be.V-evidently.V-IND(3p)-it.is.said God-TMs catch-C10(3p)
 over(DA:E) whale-have.as.one's.N-APO(3p-3p)
 'It is said that this was to announce to God that a whale had been struck.'
 (APc-216)

=nguq is also used for marking attributed discourse in conversation. In such cases, the source of the discourse can, as in the above cases, not be obvious to the hearer. Examples are 69, in a conversational statement, and 70, in a conversational question.

- (69) Tuqullghitughnguq. Nagaqughaqa naallghusimaniluku
 qepghaghaqughnguq.
 tuqu-llghit⁰e-uq=nguq nagaqugh-aqa naallghute-(i/u)ma-ni-luku qepghagh-
 aqe-uq=nguq
 die-NEG-IND(3s)-it.is.said hear-IND(1s-3s) heal-PST-say.that.V-APO(3p-
 3s) work-PROG-IND(3s)-it.is.said
 'He hasn't died. I heard that he has recovered and started working.' (HEN-
 7)

- (70) Nalluksikinguq naken design-et tagikaatangi?
 nallu-ke-ziki=nguq na-ken design-e-t tagi-kau-(u)ta-(ng)i
 not.know-TR-INT(2s-3p) where-MDs (English)-RLs come-PST-
 device.for.V-ing-AB(3s-p)

(repeated later as:)

Igallghet naken tagikaatanginguq nalluksiki?
 iga-llegh-t na-ken tagi-kau-(u)ta-(ng)i=nguq nallu-ke-ziki
 design-act.of.V-ing-RLs where-MDs come-PST-device.for.V-ing-AB(3s-
 p)-it.is.said not.know-TR-INT(2s-3p)
 'Do you know where they say those (tattoo) designs came from?' (NBK/7-
 52)

Qavngaghnguq ulimakaawat tamaakut?
 qavnga=nguq ulima-kau-at tamaa-ku-t
 when-it.is.said make-PST-INT(3p) there(D:E)-PL-ABp
 'When were those (tattoos) made, it is said?' (NBK/7-49)

However, when =nguq marks attributed discourse in conversation, the source of the discourse is more often obvious to the hearer in the speech context, as noted by Woodbury (1983:1-2) for the corresponding CAY enclitic =gguq. The source of the discourse is obvious in examples 71 through 74. In example 71, a conversation occurring in a tale, it is clear that the person Qalu is addressing knows who has been talking to Qalu:

- (71) Qineghlluni, pimakanga, 'Tuunaanghitaannguq, ellngitallunguq
 neghelleqaat.'
 qineghe-luni pi-(i/u)ma-kanga tuune-naanghit^oe-aat=nguq ell-
 (ng)ita=llu=nguq negh(e)-lleqe-aat.
 look.in-APO(3s) say-PST-TRP(3s-3s) give-FUT.NEG-IND(3p-3s)-
 it.is.said PN-RL(3p)-also-it.is.said eat-FUT-IND(3p-3s)
 'Looking in, Qalu told him, "They will not give it (seal), they said, they even
 want to eat it, they said."' (NBK/Ø-12, 13; MEc-260)

=nguq is used with a verb in the OPT mood for indicating a request in attributed speech. An example occurs in the last sentence of the following conversation:

- (72) A. Esghaamaaqa naan estugam manughaani.
 esghagh-(i/u)ma-aqa naa-n estugagh-m manughagh-(ng)ani
 see-PST-IND(1s-3s) mother-AB(2s-s) store-RLs front-LC(3s-s)
 'I saw your mother outside the store.'
 B. Tugumiighllagufta?
 tugu-miigh-ghllag-(ng)u-fte-a
 take-N.holding-big.N-be.N-evidently.V-INT(3s)
 'Was she carrying many things?'

- A. Aa-a, kayusiisaghtuqaghunguq taglaannaqegkangi saghyani.
 aa-a kayusigh-(u)te-yaghtugh-qagh-ggu=nguq taglagh-(u)te-naq-kangi
 saghya-ni
 yes help-TR-go.V-briefly.V-OPT(2s-3s)-it.is.said go.up-V.with-
 PROSP-TRP(3s-3p) thing-AB(3Rs-p)
 'Yes, she wanted you to come and help her carry the things.' (NBK/7-26)

Note that *kayusiisaghtuqaghunguq* is literally: "'come and help her'", it is said'.

Another example, from the SFE, is

- (73) Ullgu ungipaatigu, aglaallinganguq Enmele-mun.
 Ullgu-Ø ungipagh-(u)te-igu aglagh-(u)te-linga=nguq Enmele-mun
 Ullgu-ABs tell-TR-OPT(2s-3s) go.home-V.with-OPT(3s-1s)-it.is.said
 Enmelen-TMs
 'Tell Ullgu to take me to Enmelen' (lit., 'Tell Ullgu: "take me, it is said, to Enmelen"'). (MEc-260)

=nguq can also be used to indicate that one is talking about an imaginary or impossible situation, in which case a good gloss would be 'let's say that...'. The following illustrative conversational sentences were uttered by five- and seven-year-old children at play:

- (74) Tengekayugetnguq snake-et.
 tenge-kayug-t=nguq snake-e-t
 fly-N.that.can.V-ABp-it.is.said (English)-ABp
 'Let's say snakes can fly.' (NBK/5-40)
- Uumnguq ataasiq qawaagemnguq neghelleqaa eggs-enga.
 u-m=nguq ataasigh-Ø qawaag-m=nguq negh(e)-lleqe-aa eggs-e-(ng)a
 here(D:R)-RLs-it.is.said one-ABs bird-RLs-it.is.said eat-FUT-IND(3s-3s)
 (English)-AB(3s-s)
 'This one (a monster made of modeling clay) will eat one of the bird's eggs.'
 (NBK/5-37)

Whangkutunguq ivaghiiqung.
 whang-ku-tung=nguq ivagh-i-aq-ukung
 PN1-PL-AB(1d)-it.is.said look.for-HALF.TR-PROG-IND(1d)
 'Let's say you and I were looking for it.' (NBK/5-37)

=nguq has a common Eskimo etymon (Fortescue 1985:217); cognates have been found for Sir. (Menovshchikov 1964:100, 115, 144, 155, 157), Nauk. (Menovshchikov 1975:319, 320, 353, 496), and Imakl. (Menovshchikov 1980:182, 183).

=qa. This enclitic is described as being 'motivating' and 'exhortative' in Menovshchikov (1967:259, 260). He translated it as 'just' or 'you see'. It indicates a polite exhortation or a request when attached to a verb in a semantically imperative sentence (with the OPT mood, or the VV postbases -lgha-/-gga-, or -na-, but also the IND mood) and indicates emphasis in other contexts. The same enclitic is also given in Bogoras ([1901]:79) with the meaning of German *doch*, which is not enlightening, since *doch* has many meanings. I am not certain that this enclitic exists on SLI, since I have not been able to elicit it, and have only found one form in my SLI data which is possibly an occurrence of it.

- (75) Nanghiquyaqegka whatenwhaqa teghha.
 nanghiqu-yagh-kegka wha-ten=wha=qa tegh-(ng)a
 try.to.do-V.in.vain-TRP(1s-3s) here(DA.R)-EQ-ever-just bottom-AB(3s-3)
 'I tried (to probe) the bottom right then and there (with my fishing gear).'
 (NBK/1-56)

Examples from Menovshchikov (1967) include:

- (76) aglaataqamkenqa
 aglagh-(u)te-aq-amken=qa
 go.home-V.with-PROG-IND(1s-2s)-just
 'let me take you home' (MEc-259)

Naayvameng tagillghaatenqa ilangqumeng!
 naayvagh-meng tagite-lgha-uten=qa ilangqugh-meng
 lake-MDs bring-FUT.OPT-IND(2s)-just fresh.ice-MDs
 'Take fresh ice from the lake!' (MEc-256)

Una telinwinanga aglaannakenqa!
 u-na-Ø telinwinanga-Ø aglagh-(u)te-na-ken=qa
 here(D.R)-na-ABs saw-ABs go.home-V.with-FUT.OPT-TRP(2s-1s)-just
 'Just take this saw!' (MEc-259)

A possible etymon for =qa is present in common Eskimo (Fortescue 1985:219), and a cognate has been found in Imakl. (Menovshchikov 1980:183), but not in other languages of the SFE. I am not certain that this form was necessarily an enclitic in Proto-Eskimo, since CSY also possesses a cognate independent particle *qaa* 'please', of which =qa is almost certainly a cliticized version.

=qun. This enclitic is an affirmative particle used in conversation and narrative for emphasizing the reliability or relevance of the information given by the speaker because it is part of his personal experience. The speaker assumes that the hearer has inaccurate or incomplete information in mind on the topic or already knows the information, but does not have it in mind at the time of speaking. In statements, it can be glossed as 'certainly', 'you will want to know that...', or 'you see, the facts were...'. If it appears that the hearer is expected to know this information, an appropriate translation is 'remember that...'. In sentences with interrogative force, =qun makes the question more emphatic, indicating that the hearer should certainly know that the speaker needs the information, and is in this context very close in meaning to =ngam (see above and examples 83 and 84 below). However, it is more polite and carries no connotation of exasperation. In imperative sentences, =qun appears to be used most often with verbs of perception such as *esghagh-* 'to see', *nagute-* 'to listen', *naagh-* 'to smell' in order to point out something that the hearer will want to perceive or realize and that the speaker has already personally experienced. This enclitic is always attached to a clause initial word, but occasionally to the second word if it contains the base *esghagh-* or if it is the first person independent pronoun. =qun forms idiomatic combinations with a large number of sentence particles and conjunctions, given in chapter 6. Examples of =qun are

- (77) With a noun or noun phrase:

Tuugkaatqun giimalgulhiit whaa kinguliighaam savikenghaaghmeng.
 tuugkagh*-t=qun giimagh-lgu-lghiit whaa kinguliighagh*-m
 savikenghaagh-meng
 harpoon.head-ABp-see socket-have.N-INP(3p) here(DA:R)
 younger.generation-RLs metal-MDs
 'Harpoon heads today have a shank made of metal.' (Implying: but remember
 the time when it was not so.) (APc-178)

Taanaqun Kiriwaaq Sivungami ayveghem nusukaa tawaten iyiighan
 iglakaghluku tazimantekaq.
 taa-na-Ø=qun Kiriwaagh-Ø Sivungagh-mi ayvegh-m nusuke-aa tawa-ten
 iyiigh-(ng)an iglakagh-luku tazima-ni-ei^oe-kagh-Ø
 there(D:R)-na-ABs-see Kiriwaaq-ABs Savoonga-LCs walrus-RLs pull.in-
 IND(3s-3s) there(DA:R)-EQ rope.loop-RL(3s-s) entangle-APO(3s-3s)
 there(DA:O)-LC-be.N-one that has.V-ed-ABs
 'The last case was that of Kiriwaaq from Savoonga. He got snagged on his
 rope and the walrus pulled him into the water.' (APc-128, 133)

This enclitic is very frequently attached to the first person independent pronoun in historical accounts with the meaning 'I remember...' or 'I remember we...', implying the hearer does not know or remember the facts:

- (78) (...) ayghilluku whangaqun meghniigatunga, ayghilluku.
 ayghigh-(u)te-luku whanga-Ø=qun meghnugh-(ng)igui^oe-unga ayghigh-
 (u)te-luku
 be accustomed.to-TR-APO(1s-3s) PN1-ABs-see be tired-never.V-IND(1s)
 be accustomed.to-TR-APO(1s-3s)
 '(...) being accustomed to it, I was never tired.' (APc-22)

Tallimaneng whangkutaqun tanpeqaqut.
 tallima-neng whang-ku-ta=qun tanpegh-ke-aqe-ut
 five-MDp PN1-PL-AB(1p)-see walrus.skin-have.as.one's.N-PROG-
 IND(3p)
 'I remember they used five hides (for building a house).' (APc-12)

(...) ilangakun whangkutaqun aywaan tungangi awatkaghtat ataasit, (...) ila-(ng)akun whang-ku-ta=qun aywa-(ng)an tunga-(ng)i awate-kaghtagh-t ataasigh-t
 part-VL(3s-s) PN1-PL-AB(1p)-see north-RL(3s-s) vicinity-AB(3s-p)
 last year-thing of N-ABp one-ABp
 '(...) sometimes they would use last year's hides on the north side, (...)'
 (APc-86, 89)

- (79) With a verb in the IND mood:

Meaning-engiteftutqun igaghyaqmeqtengnga.
 meaning-e-(ng)it^oe-fte-ut=qun igagh-yaqmeqtengnga
 (English)-not have N-apparently, V-IND(3p)-see tattoo-TPO(3Rp-1s)
 'At the time they tattooed me, I remember they (the tattoos) did not have meaning.' (NBK/7-46, 47)

- (80) With a verb in the APO mood:

Naanneghllupiguut, pegtaqlukiqun enraq kakiqelghit.
 na-ni-et^oe-neghllug-pig-(ng)u-ut pegte-aqe-luki=qun enraq kaki-aqe-lghit
 where-LC-be at N-something hard to V-very N-be N-IND(3p) release-
 PROG-APO(3p-3p)-see yet sew-PROG-INP(3p)
 'It takes a long time to gather enough of them (crested auklet skins), so you have to work on them little by little.' (APc-106)

- (81) With a verb in the TRP mood:

Esghaghhu esghaqevngaun mataghmelnguunga.
 esghagh-eggu esghagh-kevnga=qun mataghmet^oe-nguunga
 look-OPT(2s-3s) look-TRP(2s-1s)-see be undressed-INP(1s)
 'Look, if you look at me, you'll see I have no clothes on.' (SLc-29)

- (82) With a verb in the INT mood:

Sangavekqun mekestaaghaamazin?
 sa-ngavek=qun mekestaaghhagh*-(ng)u-(i/u)ma-zin
 do-CQO(2s)-see small.thing-be.N-PST-INT(2s)
 'Why were you so small?' (BAa-77)

The combination of =qun with a verb in the OPT mood can have interrogative force:

- (83) (Child:) What time? (will we go swimming?) (In English)
 (Mother:) Four o'clock. (In English)
 (Child:) Sangan three o'clock?
 sa-ngan three o'clock
 do-CQO(3s) (English)
 'Why not three o'clock?'
 (Mother:) Natenqun three-ekellaagmi pilta?
 na-ten=qun three-ekellaag-mi pi-lta
 where-EQ-see (English)-LCs go-OPT(1p)
 'How can we go at three o'clock?' (You know very well
 we are supposed to work till four!) (NBK/5-71)

An illustration of the basic equivalence of =qun with the OPT mood in sentences with interrogative force and =ngam with the INT mood is provided by the two sentences below, which are exactly corresponding lines in two versions (SLb and SEP) of the same *ungipaghaan*. The situation is the following: a giant has imprisoned five little girls in a large parka which is tied on top of a high pole; there is a magic formula which when said by anyone but the girls themselves can make the pole bend down. The girls have just called out to a fox, imploring him to help free them. The fox is willing, but needs instructions on how to proceed.

- (84) Natenngam pinaqsinga?
 na-ten=ngam pi-naqe-zinga
 where-EQ-then do-try.to.V-INT(1s)
 'How can I do this?' (SLb-4)

Natenqun itemullamsi?
 na-ten=qun iteme-(u)te-lamsi
 where-EQ-see come undone-TR-OPT(1s-2p)
 'How can I release you?' (SEP-3)

Other examples of =qun, both from SLI and the SFE, in imperative clauses with the OPT mood or postbases with imperative force are

(85) Containing the verb *esghagh-* 'to see':

Angyaqa esghaqagnakenqun, pinipigtuq!
 angyagh-ka esghagh-qagh-na-ken=qun, pinigh-pigte-uq
 boat-AB(1s-s) look-please.V-FUT.OPT-TRP(2s-3s)-see be good-very.V-
 IND(3s)
 'Look at my boat, it's very good!' (MEC-258)

Awerghalghutaqun esghaghyaghtuqaghhu, iqangitepigtuq!
 awergha-lghutagh-Ø=qun esghagh-yaghtugh-qagh-ggu iqangit⁰e-pigte-uq
 animal.pelts-place.for.N-ABs-see look-go.to.V-please.V-OPT(2s-3s)
 be.clean-very.V-IND(3s)
 'Come and look at the animal farm, it's so clean!' (MEC-259)

(...) maninguutaqut, esghaghhuqun June-em naangneghani taakwani (...)
 manig-nge-(t)uute-aqe-ut esghagh-ggu=qun June-m naange-negh-(ng)ani
 taakwa-ni
 egg-acquire.N-V.as.a.group-PROG-IND(3p) look-OPT(2s-3s)-see
 (English)-RLs end.act.of.V-ing-LC(3s-s) approaching(DA)-LC
 '(...) they are going to have their eggs, believe it or not, right around the end
 of June (...)' (NBK/1-77)

Ii-i unaqun, qikmighput ighnimaaq. Esghaghyaghtuqaghtegguqun!
 ii-i u-na-Ø=qun qikmigh-put ighni-(i/u)ma-uq esghagh-yaghtugh-qaghte-
 ggu=qun
 see here(D:R)-na-ABs-see dog-AB(1p-s) give-birth-PST-IND(3s) look-
 go.to.V-briefly.V-OPT(2s-3s)-see
 'Look at this, our dog had puppies. Come and see it!' (AP-1)

- (86) Containing other verb bases:

Nagataghtekqun, tuqlughaghaa Elijah!
 nagatagh-tek=qun tuqlughagh-aa Elijah-Ø
 listen-OPT(2p)-see call.loudly-IND(3s-3s) (English)-ABs
 'Listen, he is calling for Elijah!' (WY-149)

Neqaghnaakenqun iqukruga, neqnighllapigtug.
 negh-qagh-na-ken=qun iqug-qrug-(ng)a neqnigh-ghllag-pigte-uq
 eat-please.V-FUT.OPT-TRP(2s-3s)-see piece-very.N-AB(3s-s) be.tasty-
 V.a.lot-very.V-IND(3s)
 'Eat a little piece, it's very tasty.' (MEc-258)

Piyakaghhaatenqun zooparka-mun, esghapallequten allaghiinaghmeng
 teghigameng.
 piyag-qagh-gga-uten=qun zooparka-mun esghapag-lleqe-uten
 allaghiinagh*-meng teghigagh-meng
 walk-please.V-FUT.OPT-IND(2s)-see zoo-TMs watch-FUT-IND(2s)
 various-MDs animal-MDs
 'Go to the zoo, you will see various animals.' (MEc-258)

Unaqun suupa naaqaghhu, neqnighllaguug!
 u-na-Ø=qun suupe-Ø naagh-qagh-ggu neqnigh-ghllagu-uq
 here(D:R)-na-ABs-see soup-ABs smell-please.V-OPT(2s-3s) be.tasty-
 be.very.V-IND(3s)
 'Smell this soup, it smells good!' (APa-15)

=qun is also common with the particle *esgha*, etymologically related to *esghagh*:

- (87) Entaqun taana yuuk pingwaaghuug esghaqun awen aaptaqaat wiin.
 Entaqun taa-na-Ø yug-Ø pi-(ngw/x)aagh-(ng)u-uq esgha=qun awen
 aapte-aqe-aat wiin
 I.think there(D:R) person-ABs something-completely.N-be.N-IND(3s)
 look-see usually ask-PROG-IND(3s-3p) not yet
 'I think that person is important as they usually ask him first (before doing
 anything).' (BAb-159)

=*qun* is of Chukchi origin and its etymology is treated in chapter 6.

=**sa**. This is an exclamatory particle used in conversation and narrative. It has been attested so far only in materials from the SFE and in *ungipaghaatet* (traditional tales) told by Grace Slwooko from Gambell, SLI. It is always attached to the first word of a clause with the INT mood, and gives it emotional connotations of indignation, delight, pity, or surprise. According to Menovshchikov (1967:260), it is most often attached to nouns or pronouns and very rarely to verbs. Examples of =*sa* being attached to nouns, demonstratives, pronouns, verbs, and particles are

(88) With a noun or noun phrase:

Iteghyalghiimi kaviighhaqsa nangllegniiteqaghta, (...)
 itegh-yalghiimi kaviigh-ghhagh*-Ø=sangllegnagh-(ng)it^oe-qagh-ta
 go.in-IPO(3Rs) fox-little.N-ABS-isn't.this.something be.pitiful-not.be.V-
 just.V-INT(3s)
 'When she (a giant) entered, wasn't the fox pitiful, (...)' (SLb-10)

Kayngenansa alingigatepigta iglegghneghmeng umegneghmi!
 Kayngen-Ø=sa alinge-(ng)igat^oe-pigte-a igleghte-negh-meng umegnegh-
 mi
 Kayngen-ABS-isn't.this.something be.afraid-never.V-very.V-INT(3s)
 travel-act.of.V-ing-MDs blizzard-LCs
 'This Kayngen is not afraid to travel in a blizzard!' (MEc-261)

Aagnasa aghnaghaq pineghllupiwa!
 aag-na-Ø=sa aghnaghagh*-Ø pineghllug-pigu-a
 over(D:E)-na-ABS-isn't.this.something girl-ABS be.obstinate-be.very.V-
 INT(3s)
 'How disobedient is that girl over there!' (MEc-261; RUa-607)

Kii, unasa aghnaq qavaneghtughllapigta!
 kii u-na-Ø=sa aghnagh-Ø qavagh-neghtu-ghllag-pigte-a
 oh here(D:R)-na-ABS-isn't.this.something woman-ABS sleep-habitually.V-
 V a.lot-very.V-INT(3s)
 'Oh, this woman sleeps so soundly!' (MEc-261)

Aghnaqsa una ukinikegtepigta!
 aghnagh-Ø=sa u-na-Ø ukini-kegte-pigte-a
 woman-ABS-isn't.this.something here(D:R)-na-ABS sew-V.well-very.V-
 INT(3s)
 'This woman sews so well!' (MEc-261)

- (89) With an independent pronoun:

Elpeksa sukatepigsin!
 ell-pek=sa sukat^oe-pigte-zin
 PN-AB(2s)-isn't.this.something go.fast-very.V-INT(2s)
 'How fast you are!' (MEc-261)

- (90) With a verb:

Kii, salaataghsin? Pineghllupiguzinsa!
 kii sa-laataagh-zin pineghllug-pigu-zin=sa
 oh do-V.one.more.time-INT(2s) be.obstinate-be.very.V-INT(2s)-
 isn't.this.something
 'Oh, you did it again? How obstinate you are!' (SLa-22)

- (91) With a particle:

Nalleghaghaleksa muluughaqsin!
 nalleghagh-ghalek=sa muluugh-aqe-zin
 too.long-how.PT.it.is-isn't.this.something be.gone.for.a.long.time-PROG-
 INT(2s)
 'You were gone for such a long time!' (SLc-103)

This enclitic does not appear to exist in any other Eskimo language. It is probably a cliticized version of the base *sa*- 'something, what?'.
 =ta. This can be termed a demonstrative performative particle, in that the speech act consisting of attaching it to a clause is equivalent to a demonstrative presentation. It is possible that this enclitic does not exist in the SFE, since it is not listed in Menovshchikov (1967), and was not found in the Soviet texts I scanned. =ta is best glossed by the French *voici* or *voilà*, and always occurs attached to the first word of a clause, most often to a demonstrative (either a D or a DA). Examples are

(92) With a D:

Paamnata iniilghii.
 paam-na-Ø=ta ini-i-lghii
 up(D:O)-na-ABs-there hang.to.dry-HALF.TR-INP(3s)
 'He hung something up there.' (BA-8)

Taanata lengaaghuutkayuk iglagtuluni wani.
 taa-na-Ø=ta lengaagh-uute-kayug-Ø iglagtu-luni wani-Ø
 there(D:R)-na-ABs-there bell-make.N.sound-one.able.to.V-ABs
 have.a.loud.voice-APO(3s) bell
 'This is a loudly ringing bell.' (NBK/10-35)

Unata pinilghii ungipaq ungipaqilghii Jesus Christ-e-meng, (...)
 u-na-Ø=ta pinigh-lghii-Ø ungipagh-Ø ungipagh-ke-i-lghii-Ø Jesus Christ-
 emeng, (...)
 here(D:R)-na-ABs-there be.good-INP-ABs news-ABs news-
 have.as.one's.N-HALF.TR-INP-ABs (English)-MDs
 'This is the Good News about Jesus Christ, (...)' (WY-1)

Ukusta nengllugutenka.
 u-ku-t=ta nengllugute-nka
 here(D:R)-PL-ABp-there family-AB(1s-3p)
 'This is my family.' (OG)

(93) With a DA, or particles that are etymologically DA:

(...) maatenta piyaghamken.
 maaten=ta pi-yagh-amken
 now-there say-V.in.vain-IND(1s-2s)
 '(...) well! I tried to warn you.' (NBK/7-4)

Pamanita taakut.
 pama-ni=ta taa-ku-t
 up(DA:O)-LC-there there(D:R)-PL-ABp
 'They are up there.' (BA-5)

tawatenta
 tawa-ten=ta
 there(D:R)-EQ-there
 'fine like that (expression of approval)' (BAb-226)

- (94) With a noun:

Panikata esgha taana.
 panig-ka=ta esgha taa-na-Ø
 daughter-AB(1s-s)-there look there(D:R)-na-ABs
 'Look, this is my daughter.' (SLd)

- (95) With an independent pronoun:

lingken akisimakanga, "Saymegergen whangata taana!"
 inge-ken akite-(i/u)ma-ka Saymegergen-Ø whanga-Ø=ta taa-na-Ø
 over(DA:R)-MD answer-PST-TRP(3s-3s) Saymegergen-ABs PN1-ABs-
 there there(D:R)-na-ABs
 'From here he answered, "Saymegergen, that's me!"' (SLe-19)

=ta often occurs in a clause containing either the verb *esghagh-* 'to see' with the OPT mood or the related particle *esgha*:

- (96) Esghata taana Qawaalgem paniga.
 esgha=ta taa-na-Ø Qawaaleg-m panig-(ng)a
 look-there there(D:R)-na-ABs Qawaalek-RLs daughter-AB(3s-s)
 'Look, that's Qawaalek's daughter.' (SLd-27)

Nayagma piinga, "Unata esghaghhu quuk aglaasaghqagh-pung."
 nayagma pi-aanga u-na-Ø=ta esghagh-ggu quug-Ø aglagh-(u)te-
 yaghqagh-pung
 sister-RL(1s-s) say-IND(3s-1s) here(D:R)-na-ABs-there sec-OPT(2s-3s)
 firewood go.home-V.with-something.that.will.be.V.ed-AB(1d-s)
 'My sister told me, "This is the firewood we have to bring home."' (SI-169)

Taanata esgha esghaghnaqegkanga.
 taa-na-Ø=ta esgha esghagh-naqe-ka-(ng)a
 there(D:R)-na-ABs-there look see-PROSP-TRP-AB(3s-s)
 'That's who she was going to see.' (HEN-11)

(...) yughaghlunga; tawaten apaatellghatun taanata esghaghhu piinlilleq
 neqengellegmeng.
 yughagh-lunga tawa-ten apagh-(u)te-llegh-(ng)atun taa-na-Ø=ta esghagh-
 ggu piinligh-llegh-Ø neqe-nge-llegh-meng
 pray-APO(1s) there(D:R)-EQ direct-TR-act.of.V-ing-EQ(3s-s) there(D:R)-
 na-ABs-there sec-OPT(2s-3s) begin-act.of.V-ing-ABs food-acquire.N-
 act.of.V-ing-MDs
 '(...) I prayed like she taught me to, that was a start to get food.' (NBK/8-64)

Yuuk pillguyugneq, esghaghuta taana paninang liisaghqaghtuqaq.
 yug-Ø pillguyugte-negh-Ø esghagh-ggu=ta taa-na-Ø paninang liite-
 yaghqagh-tuqaq-Ø
 person-ABs put.on.airs-one.that.V's-ABs sec-OPT(2s-3s)-there
 there(D:R)-na-ABs still learn-something.that.will.V-
 one.that.has.lots.of.V-ABs
 'The conceited man, that one does not yet know as he ought to know.'
 (WYb-25)

This enclitic does not appear to exist in any other Eskimo language. It is probably a cliticized version of the first morpheme of the demonstrative particle *taameng* 'no wonder! so that's why!'. *taa-* is cognate with the Greenlandic particle *ta* 'listen; what's that?' (Fortescue 1984:356). *=ta* and cognate particles are probably related to the Eskimo prefix which shifts the deictic reference point from the speaker's location to another location in time or space (Denny 1982:362; Bergsland 1955:69). This prefix has the form *ta-/tes-* in CSY, and occurs with demonstratives in all Eskimo languages.

=tuq. This is an optative particle meaning 'I hope', 'I wish', or 'I wonder'. It is used in conversation and when talking to oneself and is always attached to the first word of the clause. This clause most often contains a verb in the INT or in a Participial mood (INP or TRP) and an interrogative word, in which case *=tuq* is translatable as 'I wonder', or a verb in the CDO or in a Participial mood without an interrogative word, in which case *=tuq* refers to a realizable or unrealizable wish.

Menovshchikov (1967:253, 254, 258) gives example sentences with clauses in the APO, CDO, INP, and TRP moods, and not with the INT mood, but it would be unsafe to conclude from this that =tuq does not occur with the INT mood in the SFF. Some idiomatic combinations of =tuq and particles are given in chapter 6.

(97) With the INT mood:

Naantatuq!
 na-ni-et^o e-a=tuq
 where-LC-be.at.N-INT(3s)-I.wish
 'I wonder where he is!' (a dog) (BA-28)

Natentuq akitutkaak.
 na-ten=tuq akite-(u)tke-aak
 where-EQ-I. wish reciprocate-V.on.account.of-INT(3d)
 'I wonder how much they cost.' (HEN-6)

Nateta, sangamituq taana nangllegnaghqaa?
 natete-a sa-ngami=tuq taa-na-Ø nangllegnaghqe-aqa
 be.what.way-INT(3s) do-CQO(3Rs)-I.wish there(D:R)-na-ABs
 feel.compassion.toward-IND(1s-3s)
 'I wonder, what's wrong with the poor guy?' (HEN-11)

Navektuq (or) Natmuntuq Ilizikun?
 na-vek=tuq na-tmun=tuq lli-zikun
 where-TM-I.wish where-TM-I.wish put-INT(1s-3s)
 'I wonder where I put it?' (NBK/Ø-46, 61)

Qakuntuq taaqelleqa?
 qakun=tuq taaqe-lleqe-a
 when-I.wish finish-FUT-INT(3s)
 'I wonder when he'll be done?' (HEN-20)

Qamuq taakwna yugem taglaaskanga eslegepigta, sangaawatuq.
 qamugh-Ø taakw-na-Ø yug-m taglagh-(u)te-ka-(ng)a eslege-pigte-a
 sangagh-(ng)u-a=tuq
 load-ABs approaching(D)-na-ABs person-RLs go.up-V.with-TRP-AB(3s-
 s) be.thick-very.V-INT(3s) what-be.N-INT(3s)-I.wish
 'The load hauled by that man looks so big that I really wonder what it is.'
 (BAb-173)

- (98) With the INP mood:

Ighivgaqutuq tagilghiiten whangkunnun.
 ighivgagh-ku=tuq tagi-lghiiten whang-kute-nun
 evening-the.next.N-I.wish come-INP(2s) PN1-PL-TM(1p)
 'I wish you could come to our home tonight.' (MEC-258)

Nakentuuq ivenruutengelghiikut.
 Na-ken=tuq ivenruute-nge-lghiikut
 where-MD-I.wish outboard.motor-acquire.N-INP(1p)
 'I wonder where we can get an outboard motor from.' (MEC-258)

- (99) With the TRP mood:

Kitumtuq atuqanga ilagaan.
 OR-tum=tuq atugh-kanga ilagaate-Ø
 who-RLs-I.wish sing-TRP(3s-3s) song-ABs
 'I wish somebody sang a song.' (MEC-258)

Maligtekamkentuq, weekend-mi entaqun maliggnayaghamken.
 maligte-kamken=tuq weekend-mi entaqun maligte-nayagh-amken
 go.with-TRP(1s-2s)-I.wish (English)-LCs I.think go.with-would.V-
 IND(1s-2s)
 'I wish I went with you, maybe on the weekend I will go with you.'
 (NBK/5-60)

- (100) With the CDO mood:

Angayuqamatuq esghaghyaqumegtengnga, seghletun kiyaghleghhiinga.
 angayuqagh-ma=tuq esghagh-yagh-kumegtengnga seghlegh-tun kiyaghte-
 lghiinga
 parent-RL(1s-p)-I.wish see-V.in.vain-CDO(3Rp-1s) bad-EQs live-INP(1s)
 'If only my parents could see me, I am having such a bad time.' (from an
ungipaghaan) (BAa-37)

- (101) With the CDO and INP moods:

Po'ta kaaskantuq, whangkutallutuq pis'mo-ngelghiikut.
 po'ta-Ø kaate-kan=tuq whang-ku-ta=llu=tuq pis'mo-nge-lghiikut
 mail-ABs arrive-CDO(3s)-I.wish PN1-PL-AB(1p)-also-I.wish letter-
 acquire.N-INP(1p)
 'If only the mail arrived, we could also get a letter.' (MEC-258)

- (102) With the APO mood:

Unatuq iqalluk uglaghluku.
 u-na-Ø=tuq iqallug-Ø uglagh-i-(te)ste-luku
 here(D:R)-na-ABs-I.wish fish-ABs be.many-HALF.TR-CAUS-APO(1s-
 3s)
 'I wish I could multiply the fish.' (MEC-258)

- (103) With the postbase *-fqagh-* 'NEGATIVE OPTATIVE' (Badten et al.
 1987:270; Jacobson 1979:72):

Whangamtuntuq nulightufqaamsi, aghnanillu ugiifqaafsi.
 whanga-mtun=tuq nulightugh-fqagh-msi aghnagh-ni=llu ugi-(ng)u-fqagh-
 fsi
 PN1-EQ(1s)-I.wish get.a.wife-NEG.OPT-(1s-2p) woman-LCP-also
 husband-be.N-NEG.OPT-(2p)
 'I would prefer that men and women stay unmarried, as I am myself.' (WYb-
 19-20)

=*tuq* has a common Eskimo etymon (Fortescue 1985:219). Cognates have been found for Sir. (Menovshchikov 1964:101, 154), Nauk. (Menovshchikov 1975:319, 320, 358, 483), and Imakl. (Menovshchikov 1980:182, 183).

=*wha*. The precise range of meanings of this enclitic has not been ascertained; it does not occur in productive combinations in my data, and there are only a few cases of such combinations in previously collected texts (and therefore the translations in the example sentences below must be considered tentative). It occurs mainly in narrative and is attached to the first word of a clause, most often in idiomatic combinations with particles. Krauss (1985:48) glosses it as 'maybe' (cf. example 1, this chapter). As far as the SFE is concerned, =*wha* has been found in idiomatic combinations with particles only, and is described as an intensive particle by Menovshchikov and Vakhtin (1983:240). It is not mentioned in Menovshchikov (1967).

In the following sentence from an *ungipaghaan*, =*wha* seems to mean 'whenever':

- (104) Tallughngaaghmi tawaten, sangwaatwhanguq mamlegpaguutut,
 amawhanguq esghaghaghtuq qirgesegminun.
 tallu-ghngaaghmi tawa-ten sa-(ng)u-at=wha=nguq mamleg-pag-(t)uute-ut
 ama=wha=nguq esghagh-aghte-uq qirgeseg-minun
 split.sinew-CSO(3Rs) there(DA:R)-EQ something-be.N-ever-it.is.said
 cause.a.shadow-V.a.lot-V.as.a.group-IND(3p) also-ever-it.is.said see-
 briefly.V-IND(3s) window-TM(3Rs-s)
 'As she was splitting sinew, some things were causing a shadow whenever
 she looked through the window.' (SLb-1)

With clauses containing a verb with the negative VV postbase -*nghit*⁰e- and the INT mood, =*wha* appears to mean 'ever', and the meaning of the whole clause can be summarized as 'Doesn't S/A ever V!' (implying: 'Of course S/A Vs all the time/a lot'). Examples are

- (105) (...), taana nanevgaghhaqwha temngi puughtingumanghita yeghrat?
 taa-na-Ø nanevgagh-ghhagh*-Ø=wha temngi puughti-(ng)u-(i/u)ma-
 nghit^oe-a yeghrat
 there(D:R)-na-ABs old.man-little.N-ABs-ever for.no.reason curse-be.N-
 PST-NEG-INT(3s) much.too.much
 '(...), wasn't there just too much of a curse on that little old man?' (SLc-61)

Qavaagunga. Nallukaqa. Umughqaanghisinwha?
 qavagh-(ng)u-unga nalluke-aqa umughqaa-nghit^oe-zin=wha
 sleep-be.V-IND(1s) not.know-IND(1s-3s) have.sleep.paralysis-NEG-
 INT(2s)-ever
 'I was sleeping. I don't know. Don't you ever have sleep paralysis?'
 (response to the question why the speaker had not reacted). (PU-10)

Saamwha riigtekenghitagu uyghagem asinganilnguq?
 sa-m=wha riigte-ke-nghit^oe-agu uyghag-m asi-(ng)ani-et^oe-nguq
 something-RLs-ever den-have.as.one's.N-NEG-INT(3s-3s) rock-RLs
 area.under-LC(3s-s)-be.at.N-INP(3s)
 'Doesn't something have it as a den, under a rock?' (KAa-32)

Uyvalallghumanghitawha. Saamwha yeghreq puughsimanghitaki?
 uyvala-llegh-(i/u)ma-nghit^oe-a=wha sa-m=wha yeghreq puughte-(i/u)ma-
 nghit^oe-aki
 practice.sorcery-act.of.V-ing-be.N-PST-NEG-INT(3s)-ever something-RLs-
 ever much.too.much fool-PST-NEG-INT(3s-3p)
 'Doesn't he ever practice sorcery? Wasn't something ever deceiving them?'
 (SL-26)

This enclitic has a common Eskimo etymon, and it has cognates in Sir. (Menovshchikov 1964:100, 121), CAY (Jacobson 1984:623; Woodbury 1981:294), and Inupiaq (Michael Fortescue, personal communication). =wha may originally be a cliticized form of the particle whaa 'here; now', often used in emphatic questions.

=Vy. This enclitic forms a rather emphatic vocative, probably used more often in narrative than in conversation. It can be attached to proper names of humans and animals, unpossessed kinship terms, and also common names of animal characters and personified inanimate objects, in particular in *ungipaghaatet* (traditional tales). It

can also be attached to demonstrative particles such as *qama* 'in there', *qakma* 'out there', *sama* 'down there', and follow demonstrative pronouns (D) that already end in the vocative postbases *-yuq* 'SINGULAR VOCATIVE' (Badten et al. 1987:308), and *-ghsi* 'NONSINGULAR VOCATIVE' (Badten et al. 1987:277). Some examples of these usages have already been given in 18 and 19; supplementary examples from SFE sources follow:

- (106) *Arepakiy, neghsagsimaanga!*
Arepaki-Ø=Vy neghsagh-te-(i/u)ma-unga
Arepaki-ABS-VOC seal-catch.N-PST-IND(1s)
 'Arepaki, I got lots of seals!' (NBK/Ø-9)

Angyaay!
angyagh-Ø=Vy
boat-ABS-VOC
 'Hey, boat!' (MV-129)

Qakmaay!
qakma=Vy
out(DA:O)-VOC
 'You out there!' (BO-14.5)

samaay!
sama=Vy
down(DA:O)-VOC
 'you down there!' (MV-129)

aagyuu!
aag-yuq=Vy
over(D:E)-SINGULAR.VOC-VOC
 'you over there!' (MV-129)

maakughsiy!
maa-ku-ghsi=Vy
here(DA:E)-PL-NONSINGULAR.VOC-VOC
 'you (pl.) here!' (NBK/Ø-24)

=Vy can also be attached to a verb, in which case it is an exclamative rather than a vocative:

- (107) Kangsughtungaay!
 kangsugh-tunga=Vy
 cannot.fit.through-IND(1s)-VOC
 'I can't fit through!' (NBK/5a-70, 73)

=Vy is phonetically similar to the CAY =i, which forms exclamative deictics from DA bases. However, there is a form identical to =Vy in Chukchi, and I argue in chapter 6 that =Vy is a loan from Chukchi, with a possible influence from a CSY cognate of CAY =i.

4.2.2. General Observations on the Function and Distribution of CSY Enclitics

In the typology of clitics elaborated by Klavans (1985:97-98, 103), the CSY enclitics belong to Type 3, that is, Initial according to Parameter 1 (Dominance), After according to her Parameter 2 (Precedence), and Enclitic according to her Parameter 3 (Phonological Liaison). This is admittedly not an interesting characterization, and it would be more revealing to be able to predict the characteristics of the CSY enclitics without the need for these three independent parameters. In a critique of Klavans' typology from the point of view of autolexical syntax, Sadock (1991:72-77) states that it is possible to derive Klavans's parameters from the syntactic and morphological facts of Eskimo. He argues that Eskimo enclitics have to be Initial, because he views enclitics as a type of particle, and Eskimo particles typically precede the phrase or clause with which they are associated. Sadock's argument is illustrated with Greenlandic data, but it would be even more convincing with CSY data, since in this language initial particles are more numerous than in Greenlandic. Concerning Parameters 2 and 3, Sadock argues that Eskimo would be expected to have enclitics only, since the remainder of Eskimo morphology is exclusively suffixing, and the prediction stemming from an autolexical analysis is that the clitics, being affixes in the morphological module, will be suffixes too.

From the point of their function in syntax and discourse, the CSY enclitics, like clitics in many other languages, are not a homogeneous category. Some enclitics have basically a modal function, such as interrogative (=lli), optative (=tuq), exhortative or exclamative (=qa, =sa, =wha). Other enclitics are evidential (=nguq), focus-marking

(108)

1st Position	2nd Position	3rd Position	4th Position
	=sa		=nguq
	=ta		
=llu	=ngam	=tuq	
		=qun	
		=wha	
		=lli	

(=llu), or have the value of a conjunction (=llu). The remainder of the enclitics can be considered pragmatic markers. Even though =lli is basically interrogative, it sometimes marks a perlocutionary act in that the hearer often responds even when he is not spoken to. Both the presentative =ta and the vocative =Vy mark illocutionary acts. =ngam and =qun mark the presupposition that the hearer is unaware that the speaker lacks crucial information. =mi shifts the attention of the hearer.

From a comparative point of view, CSY has a rather rich array of enclitics, since it developed three enclitics from particles (=sa, =ta, =wha) and borrowed two from Chukchi (=qun, =Vy).

4.3. The Relative Order of Enclitics

Except for =Vy, all enclitics can occur in combinations. Illustrated in 108 is the basic order of productive combinations of two enclitics. It is probably incomplete. As in productive combinations of postbases, the second enclitic has semantic scope over the preceding enclitic. It appears that there is a maximum of four position classes.

The combinations of more than two enclitics that are predicted by this diagram are probably possible, but no combination of four enclitics occurs in my data, and only one combination of three enclitics was found:

- (109) Pavillutughnguq egmightataqelghii.
 Pavi-Ø=llu=tuq=nguq egmightate-aqe-lghii
 Pavi-ABS-also-it.is.said compete-PROG-INP(3s)
 'It is said I wish Pavi too was competing.' (MEc-253, 254)

Examples of sequences of two enclitics predicted by the above diagram are

- (110) With =sa as the first enclitic:

neqekitaghaghtatsanguq
 neqekitaghagh-tat=sa=nguq
 eat.repeatedly-INT(3p)-isn't.this.something-it.is.said
 'they were repeatedly eating so much, it is said' (SLd-2)

- (111) With =ta as the first enclitic:

taanatanguq
 taa-na-Ø=ta=nguq
 there(D:R)-na-ABs-there-it.is.said
 'that was it, it is said' (SLc-4)

- (112) With =llu as the first enclitic:

Aghluuy, elpeklungam mughusagutenngam!
 Aghlu-Ø=Vy ell-pek=llu=ngam mughute-yagute-n=ngam
 Aghlu-ABs-VOC PN-AB(2s)-also-then hunt.on.ice-reach.a.state.of-
 OPT(2s)-then
 'Aghlu, you too should be hunting now!' (MEc-257)

Whangallutuq suflugangelghiinga!
 whanga-Ø=llu=tuq suflugagh-nge-lghiinga
 PN1-ABs-also-I.wish gun-acquire.N-INP(1s)
 'I wish I got a gun too!' (HEN-20)

Paanpaanllunguq dragon-em malighqaghaqaa.
 Panaghagh-Ø=llu=nguq dragon-m malighqagh-aqe-aa
 Paanpaan-ABs-also-it.is.said (English)-RLs chase-PROG-IND(3s-3s)
 'Let's say the dragon was chasing Paanpaan too.' (NBK/5-34)

melluwha
 me-Ø=llu=wha
 voice-ABs-also-ever
 'a voice also, maybe' (KRA-48)

Kii, sangwaatlulli amaaghllaget uugniiqegkangit?
 kii sa-(ng)u-at=llu=lli amaa-ghllag-t uugte-ni-aqe-kangit
 oh what-be.N-INT(3p)-also-again wolf-big.N-ABp get.up.onto-say.that.V-
 PROG-TRP(3p-3p)
 'Oh, and what were those wolves that got on the island?' (NBK/8-67)

malluqun?
 me-Ø=llu=qun
 voice-ABs-also-see
 'a voice also, remember?' (KRAa-48)

(113) With =ngam as the first enclitic:

Tawatenngamtuq pilghiinga.
 tawa-ten=ngam=tuq pi-lghiinga
 there(DA:R)-EQ-then-I.wish say-INP(1s)
 'I have said enough, I guess' (last sentence of an autobiographical account).
 (IRR-9)

Sangamangamnguq igaqnaqaanga, igaghnaaluninguq tawaten?
 sa-ngama=ngam=nguq igagh-ke-naqe-aanga igagh-na-luni=nguq tawa-ten
 do-CQO(1s)-then-it.is.said tattoo-have.as.one's.N-PROSP-IND(3s-1s)
 tattoo-in.order.to.V-APO(3s)-it.is.said there(DA:R)-EQ
 'For what reason is she taking a picture of me, is she going to be tattooed
 also?' (NBK/7-58)

(114) With =qun as the first enclitic:

leganqunnguq
 legan=qun=nguq
 and.so-see-it.is.said
 'and so, it is said' (SLc-38; SL-4-5)

wetkuqunnguq
 wetku=qun=nguq
 when-see-it.is.said
 'when, it is said' (T/53-34)

- (115) With *=tuq* as the first enclitic:

unaamitughnguq
 unaami=tuq=nguq
 tomorrow-I.wish-it.is.said
 'tomorrow, I wish, it is said' (MEc-258)

- (116) With *=wha* as the first enclitic:

For a sentence with *=wha=nguq*, see example 104.

There are two kinds of orderings not given in the diagram in 108. *=llu* seems to have a relatively free position, even though it occurs most commonly in first position. It can apparently occur after *=qun*, even when there is already a *=llu* before the *=qun*:

- (117) pilluqunllu?
 pi-Ø=llu=qun=llu
 thing-ABs-also-see-also
 'a thing also, remember too?' (KRAa-48)

The second kind of ordering not predicted by the diagram is due to the existence of a number of lexicalized combinations of particles and enclitics. These lexicalized combinations are listed and discussed in chapter 6. I only point out here that it is possible for such combinations to be followed by another enclitic as a productive element. In this way, various sequences of enclitics can occur, including many not given in 108, and even sequences of two identical enclitics, where the first is a lexicalized part of the particle and the second is productive. Examples are

- (118) With *=mi* as the first lexicalized enclitic:

qayughmimi?
 qayughmi=mi
 how.then-what.about
 'what to do?; what is to be done?' (RUa-263)

saamituq
 saami=tuq
 I.don't.know-I.wish
 'I really don't know, I wish I would' (NBK/8-79)

qayughmiwha
 qayughmi=wha
 how.then-ever
 'how then ever' (RUa-263)

- (119) With =nguq as the first lexicalized enclitic:

llaaghinaanguqlu
 llaaghinaanguq=llu
 I'm.glad-also
 'also I'm glad' (BA-51)

- (120) With =qun as the first lexicalized enclitic:

Entaquunllu kumaagtaaten.
 entaquun=llu kumaagte-aaten
 I.think-also be.infested.with.lice-IND(3p-2s)
 'Also I think you're infested with lice.' (SLd-9)

(...) entaquunnguq Ruuseghmiit qaakumaat maavek qiighqamun.
 entaquun=nguq Ruusegh-mii-t qaake-(i/u)ma-aat maa-vek qiighqagh-mun
 I.think-it.is.said Russia-people.of-RLp put.up.on-PST-IND(3p-3s)
 here(DA:E)-TM island-TMs
 '(...) it is said, I think, the Russians had put him on the island (a brown bear).' (NBK/8-67)

entaqunqun
 entaquun=qun
 I.think-see
 'I think, you see' (PF)

entaqunta!
 entaqun=ta
 I.think-there
 'but now then!' (RUa-581)

- (121) With =*wha* as the first lexicalized enclitic:

tanemwhaqa
 tanemwha=qa
 then.also-just
 'just then also' (OT-7; AN-57)

Whaawhaqun, tuunaghpenga.
 whaawha=qun tuune-aghpenga
 at.least-see give-IND(2s-1s)
 'At least you gave me some, fine.' (GOL-pc)

Concerning the forms in 122, which probably contain a lexicalized combination of the enclitic =*llu* and a suffix *-am*, their analysis and meaning are not clear. One can conclude from its postenclitic position that *-am* is etymologically an enclitic, but it does not occur productively in CSY. As stated at the beginning of this chapter, *-am* is better considered as a suffix and is discussed in chapter 6.

- (122) kergamllaam
 kergam=llaam
 no.sooner.than-?
 'as soon as, when' (RUa-235)

maatenllaam
 maaten=llaam
 now-?
 'this time' (BAb-113)

sanganllaam
 sa-ngan=llaam
 do-CQO(3s)-?
 'why now? (?)' (T/52-25)

In conclusion, it should be noted that the presence of unexpected enclitic orders in idiomatic combinations does not invalidate a description of enclitic ordering in terms of position classes. Admittedly, the existence of one relatively freely ordered enclitic calls into doubt the validity of such position classes, since there is no evidence that a more detailed investigation would not uncover other movable enclitics insofar as the resulting combinations are compatible in terms of semantic scope. However, enclitic order has been handled with position classes in two authoritative descriptions of other Eskimo languages, Bergsland (1955:84) for Greenlandic and Woodbury (1981:293) for CAY, and the CSY order according to function is roughly in agreement with that of these two other position class accounts. In particular, the connective (CSY and CAY =*llu*, Greenlandic =*lu*) always comes in a front position, and the quotative (CSY =*nguq*, CAY =*gguq*, Greenlandic =*guuq*) always in a relatively back position.

Chukchi and Siberian Eskimo: Chukotka and the Bering Sea as a Linguistic Area

Of the Arctic regions of the world, the Chukotka and Bering Sea area can be considered the most complex from a linguistic point of view. In this area, the Eskimo languages, those spoken in the past and those in the present, are more diverse than anywhere else. Furthermore, within the Eskimo-Aleut language family, contacts of Eskimo with non-Eskimo native languages (especially Chukotan) as well as with several Indo-European languages (especially English and Russian) have been extensive.

The purpose of this chapter is to provide historical and cultural evidence for the existence of an area composed of eastern Chukotka and the adjacent Bering Sea region, including SLI, which can be set apart from any other Eskimo cultural region in that it has undergone a pervasive Chukotan cultural and linguistic influence.

Section 5.1 documents the long history of contact between the speakers of the various languages that are or were spoken in the area and outlines the resulting patterns of bilingualism and language interference. The emphasis is on the relationships between Chukotan and Siberian Eskimo, but the later linguistic influences of English and Russian on the area is also treated in detail. Section 5.2 documents the cultural evidence for Chukchi and Eskimo linguistic contacts, in particular as reflected by CSY clan names, place names, personal names, and folklore. Finally, section 5.3 describes cases of pidginization that have occurred in Chukotka and the Bering Sea area as a result of these contacts.

This chapter is thus the cultural and historical background to chapter 6, in which the grammatical and lexical data showing influence of Chukchi on CSY is presented in detail.

5.1. A Sociolinguistic History of Chukotka and the Bering Sea Area, with Particular Reference to Eskimo and Chukchi

The history of trade and contact between the Eskimo and the Chukchi, the later influence of English and Russian speakers in the area, and the sociolinguistic implications discussed in this section can be divided into four periods.

The first period approximately covers the "prehistory" of native peoples, that is, their history before white contact and the first contacts of Russian explorers with Paleo-Siberian people.

There is archeological evidence that groups that were culturally, and most probably linguistically, Eskimo at one time occupied a very extensive area of the Siberian coast, reaching much farther west and southwest than they do now. On the northern coast of the Siberian mainland, Eskimo sites have been found as far west as the Bear Islands near the mouth of the Kolyma River, almost 800 miles from East Cape, and on the southern coast as far west as near Magadan on the Sea of Okhotsk (Ackerman 1984:107-8).

The Proto-Eskimo homeland is believed to be located in western Alaska, and the Eskimo probably expanded westward to the Chukotka coast during the last centuries B.C. to the first few centuries of the Christian era. Coming from the southwest, the Chukchi reached the Bering Sea region much later than the Eskimo. More technologically advanced Tungusic-speaking peoples expanding northward had taught the Chukchi and Koryak the domestication of reindeer. This new economy brought about demographic expansion, the need for new pastures, and eventually the displacement of the Eskimos toward the east. There is evidence that the Chukchi reached the Anadyr River basin in the fourth to fifth centuries A.D. and that there was armed confrontation between Chukchi and Eskimo in the twelfth to sixteenth centuries A.D. It is also estimated that part of the Chukchi first adopted a maritime economy in the sixteenth to seventeenth centuries and displaced or incorporated the Eskimo in a growing number of coastal settlements between the seventeenth and nineteenth centuries (Ackerman 1984:115, 118). By that time, Eskimo settlements existed only on Chukchi Peninsula and, of course, on SLI; there is no evidence that the Chukchi ever settled on SLI.

The first Russian traders encountered the Chukchi in the middle of the seventeenth century; the Chukchi were more than willing to trade, but successfully kept their own economic independence and persistently resisted having to pay tribute to the czar (Sverdrup 1978:213-15). They were also proud enough to insist on speaking their own language with their trading partners, Russian as well as Eskimo (Nordenskiöld 1882:404; Gerland 1883:216; Jakobson 1942:605). Apparently, the Eskimos were more economically dependent on the Chukchi than the other way around. Thus, Chukchi-Eskimo bilingualism was required of the Eskimos, but not of the Chukchi (Krupnik and Chlenov 1979:26; Menovshchikov 1986:63, 75). The contacts between the two groups were dictated by economic necessity rather than by personal relationships, and the Chukchi did not seem to have held the Eskimos in high regard. Up to the beginning of this century, intermarriage between the Chukchi

and the Eskimo was the exception rather than the rule (Gerland 1883:217-18). Krupnik and Chlenov note one exception to this pattern, concerning the *Qiwaghmiit* Eskimos and the maritime Chukchi from Chechen, who formed one social community, in which the Chukchi as well as Eskimos were fully bilingual (1979:24, 26).

As an island, "prehistoric" SLI was in a demographic situation different from that of the mainland. It had a location desirable for hunting and whaling, being near to the bowhead whale migration routes and having coasts with an abundant walrus and other marine mammal population. It is then not surprising that the island has sustained a relatively large Eskimo population for centuries. There might even have been situations of relative overpopulation, which would lead to intergroup competition and even wars and feuds between various villages as well as with Siberian groups.

Geist (1936:12) reports that some SLI people knew of extinct villages near Gambell that were nearly exterminated through such warfare. Large populations also existed on the mainland, and probably explain the emergence of a warrior cult in the region during the Puvuk cultural phase (A.D. 600 or 700 to 1000 or 1200) (Ackerman 1984:110, 112). In more recent times, there were still occasional hostilities between mainland Eskimo and SLI people; accounts of Siberians raiding on SLI were remembered (Geist 1936:26), and are still told (Silook 1976:6, 10-11).

The largest danger that the large SLI population had to face, however, was not an occasional raid, but starvation. If for some reason the whale or walrus migrations did not take place on time and if for some reason the stored food supply did not suffice, famine could quickly follow. Starvation is of course never unknown among a hunting people, but this occurrence becomes more serious in the case of a relatively large group on an isolated island, and can reach catastrophic proportions. In a bad year, the Eskimos on the mainland could always rely on the reindeer meat supply acquired by trading with the reindeer-herding Chukchi, but such an option was not available to the SLI people if the weather did not allow the trip.

One such catastrophic famine, maybe accompanied by an epidemic, occurred in the winter of 1878-79, during which over three-fourths of the island's population (estimated between 1,500 and 3,000) died (Moore 1923:356-58; Collins 1937:22-24; Hughes 1960:11-13; Krauss 1980:46, 104). Only the villages of Gambell and Powoiliak contained survivors, and numerous other villages of the island were decimated (Geist 1936:45-46). According to Krauss (1975:44), there is evidence that the only survivor from the large village of Kialegak (CSY *Kiyalighaq*) on Southeast Cape had spoken a language different from CSY, and thus the famine is apparently responsible for the disappearance of a whole language community. Although this

famine is the only one that is historically documented, there is evidence that there were others, although less severe ones (Hughes 1960:12).

Because of these famines, as well as occasional warfare, and also taking the desirable position of the island into account, it is very likely that periodic migrations from the mainland occurred in the past in order to repopulate the island. There is little evidence as to how extensive or frequent these have been, but Siberian clans or families are said to have immigrated to the island around the middle of the eighteenth century and in the first or second decade of this century (Geist 1936:11; Hughes 1960:250, 252). The relationship between such migrations and clan names is discussed in subsection 5.2.1. These hypothetical periodic populations could prove extremely important for determining the precise linguistic makeup of the present-day SLI population.

Except for the occasional periods of hostility referred to above, the relationships between people from the Siberian mainland and SLI people involved social visiting in the summer and trading relationships (Silook 1976:1, 4, 6-7, 13-16). For hundreds of years, there had been an extensive trade between the two groups, involving the exchange of products from marine mammals, in particular ivory and seal skins and oil, for products from the reindeer herds, in particular skins and meat, ultimately obtained from the Chukchi (Geist 1936:15, 26; Hughes 1984a:266, 274; Sverdrup 1978:104-6; Menovshchikov 1986:63).

One might expect that linguistic contacts between Chukchi and SLI Eskimos were more superficial and indirect than for SFE Eskimos. At least in the nineteenth century, and probably earlier as well, the middlemen for the trade were not the Chukchi, since these did not usually cross over to SLI, but enterprising Eskimos who spent part of the year living in Siberia and part of the year on SLI (Nick Wongittilin, personal communication). However, even though Chukchi lexical influence is nowadays less extensive on SLI than in the SFE, and probably always was, the Chukchi influence on the CSY of SLI must be quite old; there is some evidence for several layers of successive borrowing (see chapter 6). One can hypothesize that the Chukchi influence on the language would have increased with the arrival of a new clan repopulating SLI from Siberia. It is likely, then, that the use of Chukchi loans is slightly more extensive among clans that arrived more recently from Siberia, but I have not been able to verify this.

The Alaskan mainland appeared to be only indirectly known by CSY people, and direct contacts seem to have been accidental. It is said on SLI that there have been contacts with Nunivak, and the people from Nunivak have tales of crews surprised by the breakup of the ice in the spring and drifting as far as SLI or the SFE

(Hammerich 1954:420). The contacts of speakers of other SFE Eskimo languages with Alaska are discussed at the end of this section.

The second period begins with the first extensive contacts of the CSY people with Americans and Europeans. Beginning approximately in 1846, American and other commercial whaling ships, most originally from New England, but using San Francisco, Seattle, and especially Hawaii as supply bases, were regularly spending summers in the Bering Strait area, pursuing whales as far north and west as Wrangell Island, and often wintering in the CSY area (Lindeman 1882:142; Collins 1937:22; Hughes 1960:187; Holm 1986:267). In comparison to SLI, winterings were more frequent on the SFE coast, and landings could last longer there than on SLI itself because the island has no natural harbors and is surrounded by strong currents. It is probably no coincidence that the first explorers, such as Bering (1728), Synd (1764-68), Cook (1778), and Billings (1791), sighted the island without landing and that other expeditions landed only for a few hours (Hughes 1960:7-8; Nordenskiöld 1882:592). In contrast to SLI, there are many natural harbors on the Chukotka mainland, which came to be well known to whalers as well as scientific expeditions. Most of these natural harbors still have English names, such as Plover Bay, Emma Harbor, Little Max Bay, and San Marcos Bay (Wells and Kelly 1982:9).

Contacts with the whalers appeared to be mostly beneficial for the Eskimos; they acquired firearms, whaling equipment, and had an opportunity to learn some of the sailor's trades. The negative results were alcohol brought by the ships, which meant occasional abuse, and disease brought by their crews. The ships stopped at Eskimo villages to replenish water supplies, to carouse, and to trade for ivory, baleen, and skin clothing. Long-term contacts were sometimes established, since in Chukotka and Alaska there were shore stations in which some members of the crew would spend the winter and hunt with the Eskimos while waiting for the return of the ship the following spring. Conversely, it was also a widespread practice on SLI, but even more often in various places on the SFE coast, to take on Eskimos as crew members of whaling ships for a year, thereby giving them an opportunity to travel and to become experienced sailors (Das Ausland 1882:904; Silook 1976:16-17, 52-53; Krupnik and Chlenov 1979:26; Hughes 1984:263; VanStone 1984:155).

Such contacts were instrumental in shaping the linguistic experience of CSY people, and the amount of English necessary for trading purposes seems to have been learned with enthusiasm, especially by the adult male population (Silook 1976:53; Krupnik and Chlenov 1979:26). Other languages were also heard by the Eskimo, since the crews of ships were often very international. There is evidence that they included Hawaiians and Africans. The CSY word for a black person is *Pureki* (Badten et al. 1987:165), probably from *Portagee* 'Portuguese', pronounced

[p5(r)tagiy]. This word, originally from vernacular American English, is used as a jocular term in southeastern New England, which has many Portuguese immigrants (Anthony Woodbury, personal communication). In Hawaiian pidgin English, it is similarly used to refer to the descendants of Portuguese workers who came to Hawaii in the 1870s (Carr 1972:95; Simonson 1981). On the whaling ships, this term referred not only to ethnic Portuguese but also to Cape Verde islanders, who were of Portuguese nationality and spoke Creole Portuguese, but were ethnically West African. There were of course also speakers of various European languages other than English on the ships. Nick Wongittilin (of Savoonga, SLI, now residing in Nome, personal communication) remembers a few numerals he was taught by some CSY children from the SFE: [áyən] 'one', [tává] 'two', [tará] 'three'. He thought this was Russian, but it is more likely to be German, possibly influenced by Russian in the case of 'two'.

The precise nature of the trading contacts and other Native-English relationships during this period is nicely illustrated by the thirty-four English loanwords in Eskimo languages of the SFE and also in Chukchi: 'America', 'beans', 'bomb-gun (whaling gun with explosive projectile)', 'boom (holding sail on boat)', 'butter', 'candy', 'Christmas', 'cigarette', 'clock', 'coal', 'cow', 'doctor', 'drum (container)', 'elephant', 'engine', 'Evinrude' (mentioned below), 'flour', 'Japanese', 'lock', 'money', 'monkey', 'onion', 'pepper', 'playing card' (< play), 'pump', 'pussy(cat)', 'rice', 'sandpaper', 'skate', 'soap', 'towel', 'trap', 'watch', and 'wire'. I believe that the contacts between whalers and natives involved Eskimos more often than Chukchi, but by that time there were already many coastal areas occupied by Chukchi alone, so it is possible that some of the English words in Chukchi were borrowed directly from the whalers and not via an Eskimo language. It is even possible that some economically less enterprising Eskimo groups acquired English words via Chukchi, surprising though it might seem. A detailed discussion and list of English loanwords in the native languages of the SFE is in de Reuse (1994).

Some English loanwords are more commonly used in the SFE than on SLI. For instance, the word for 'towel' is most often *tawli-* in the SFE, but rather the originally Eskimo word *veglug-* on SLI (Badten et al. 1987:226). Such cases point again to a period when contacts with English speakers were more extensive in the SFE than on SLI.

The enthusiasm for the English language during this period is also apparent in the CSY songs recorded by Bogoras in 1901 (1913:440-41) at *Ungaziq* (Chaplino). These often contained English words, either swearwords or meaningless sequences of English words put in for fun. Bogoras (1913:441) explains that "Mai'o, like all

the young men, had a strong desire to learn some English. Having no means to do so, he would imitate English songs and words, and put them into his songs."

It is likely that most early Russian loanwords entered CSY via Chukchi; these are listed in the discussion of Chukchi loanwords in chapter 6. The following Russian loanwords have not been recorded in Chukchi, but do occur on SLI, and therefore might have been borrowed directly from Russian around the whaling period or possibly earlier:

kufi- 'coffee'; Russian *kófe*.

maghhuurka- 'leaf tobacco'; Russian *maxórka*.

mesiine- 'sewing machine'; Russian *masína* (not in Badten et al. [1987] or Rubtsova [1971]); Hammerich (1954:418) argues that this might be a relatively early Russian loanword, but it could of course also be from English *machine*.

peluuse- 'saucer'; Russian *bljúdce*.

puuskaate- (ABs *puuskaan*) (Badten et al. 1987:165-66), *puuskaane*- (Rubtsova 1971:426) 'whaling gun, harpoon gun'; Russian *púška* 'gun; cannon'. According to Badten et al. (1987), from English "push" and English "gun" due to the way in which the gun is thrust along with the harpoon. But since *púška* is a regular Russian word and since there is no word "pushgun" in English, a Russian origin is to be preferred; it is likely that the final *n* points to influence of "gun".

samuwagh- 'samovar'; Russian *samovár*.

There is evidence, however, that the Eskimos and coastal Chukchi of this period had generally very little contact with Russians, and even in isolated areas knew more English than Russian. Nordenskiöld (1882:342, 340) notes that at Cape Shelagskij and in the Chukchi village of Irkaipij along the northern coast of Chukotka, he found a child who was able to count tolerably well up to ten in English, but nobody who knew a word of Russian.

As far as the ancient economic relationship between Eskimo and Chukchi is concerned, the whaling period also had its influence, albeit a more indirect one. New opportunities for trading had now appeared in the coastal areas, and many of these areas were still inhabited by a majority of Eskimos. The Chukchi, who did not want

to pass by a new opportunity for trading, had to become more reliant on the Eskimos, since these were the middlemen, not only on SLI but also now on the Chukotka coast (Dall 1870:514). I would surmise that in this new economic relationship, the Eskimo were more in control economically and probably also socially. In this more socially balanced situation, I would also expect there to be closer personal relationships between Eskimo and Chukchi, more intermarriage, and also more linguistic interference between Eskimo and Chukchi, at least in the SFE. Since the Eskimos had always been the middlemen between SLI and the mainland, maybe there was no increase of Chukchi linguistic influence on SLI, where the Chukchi influence was more indirect. Cultural influences, however, of Chukchi on Eskimo continued. About the middle of the nineteenth century on SLI, and probably earlier on the mainland, the traditional communal semisubterranean sod-covered winter habitation, or *nenglu* (cognate with Inuit *iglu* [Schneider 1970:71], the origin of English *igloo*), was replaced by the *mangteghaq*, a structure of driftwood and lumber walls with a roof of walrus skins, which was modeled after the Chukchi winter tent (Hughes 1984:251, 1984a:271).¹

In 1894, the first permanent agency of contact with the continental United States was established by the Presbyterian church, a combined school and mission (Hughes 1960:13). Sheldon Jackson, a Presbyterian missionary who was also the first U.S. General Agent of Education for Alaska (1885-1908), defined the educational policies to be used in such schools: all instruction was to be in English only, and the use of the native language was to be actively discouraged. This policy was enforced in 1910 and remained in effect for the next fifty years, but it was apparently not efficient in suppressing CSY in SLI schools, considering the vitality of the language up to now (Krauss 1980:95, 96, 105). In any event, for the first time, CSY children were exposed to intensive schooling in a language other than their mother tongue.

To some extent, the SLI people were also less economically reliant on the Chukchi because of the introduction of reindeer on the island in 1897 through the prompting of Jackson. In 1917, Savoonga, originally a reindeer herder's camp, became a permanent village (Hughes 1960:14; Krauss 1975:43, 44).

About 1900, the Bering Sea whaling period was over, following the decline of the market for baleen and whale oil. The CSY people did not lose all their economic assets, however, because trade in arctic fox skins continued until the early thirties (Hughes 1960:14, 187). Probably, by the end of this period, there was already a

¹ Even though the *mangteghaq* was adopted under Chukchi influence, the word itself is Eskimo and cognate with CAY *mamteraq* 'cache, storehouse, warehouse' (Jacobson 1984:225).

quantitative and qualitative difference in the amount of Chukchi influence between the SFE mainland and SLI. Although the SFE people continued using Chukchi as the trade language, the SLI people started using English more often for trading purposes.

For the third and fourth period, it becomes necessary to split the sociolinguistic unity of the Chukotka and Bering Sea area into a Soviet and an American side.

The third period extends from the October Revolution (1917) to the advent of the Cold War (1948). Following the collapse of the whaling industry, CSY and Chukchi people on the mainland lost contact with speakers of English and other European languages. In the SFE, czarist influences had come too late and were too weak to be significant, but with the Soviet regime came the beginning of direct Russian influence. By the 1920s, American traders were no longer allowed to have outposts in Chukotka. Soviet schools were established for the CSY people in 1927. The educational policies were relatively liberal, since a large amount of pedagogical materials in the native language was published (Krauss 1976:193-97).

On SLI, the intensification of assimilation policies to English and the establishment of a military camp at Gambell (1948-1955) made the islanders culturally and linguistically more turned toward the continental United States (Hughes 1960:298). However, there were still contacts with the SFE, and therefore with the Chukchi. There are several accounts of visits of islanders to the SFE made during this period; the last trips were apparently made in the forties and were officially forbidden in 1948 (Krauss 1980:105). However, such visits had already become uncommon. In the thirties, the most common encounters with Siberians were by hunters on the ice near the International Date Line; both sides were still well acquainted and often related (Geist 1936:17).

One English loanword in all SFE Eskimo languages which can be placed with certainty in the beginning of this period is the brand name Evinrude: CSY *ivenruute-* (Rubtsova 1971:136; Badten et al. 1987:84), Nauk. *ivərugħək* (Menovshchikov 1975:407), Sir. *ivenruta* (Menovshchikov 1964:181), Imakl. *ivuroq* (Menovshchikov 1980:236) 'outboard motor'. The use of Evinrude outboard motors started on SLI in 1916 (Hughes 1960:221) and probably a little later in the SFE.

The fourth and last period extends from the early fifties to the present. For the first time in history, contacts between the SFE and SLI were made completely impossible. In 1985, there were still several people on SLI who were born in the SFE, but moved before they were old enough to remember; among the current oldest residents of the island, few, if any, ever visited the SFE, and just have some memories of visits by Siberians.

Due to the improved political relationships, contacts between the two sides of the International Date Line have been recently restored. Since June 1988, there have

been several airplane flights between Nome, Alaska, and Provideniya, SFE, and CSY speakers from SLI have had the opportunity to visit SFE CSY speakers, including relatives, in Provideniya, New Chaplino, and Sireniki (*Time*, June 27, 1988; Garrett [1988]; Achirgina [1988]; Steven Jacobson, personal communication). As of 1992, there continue to be several chartered flights a year between Alaska and the SFE, and quite a few CSY speakers as well as Chukchis from the SFE have had an opportunity to visit Nome, Anchorage, and Fairbanks. In 1989, an agreement was signed between the governments of the United States and the USSR concerning mutual visits by inhabitants of the Bering Strait region. This agreement allows and regulates visits of natives from either side without a visa. It is, of course, too early to tell what consequences these new developments will have for the sociolinguistic history of CSY.

In the SFE, there appears to be a continued and accelerated assimilation of CSY speakers to Chukchi and especially Russian. By the sixties, there was a significant decrease in the rate of publication of books in CSY Eskimo, and since 1900 the Soviet Eskimo population has failed to increase. This is due to the consolidation of smaller villages into bigger settlements (also farther away from SLI) and to the official encouragement to mix with and intermarry with Chukchi for economic reasons, so that many Eskimos have ceased to identify themselves as such. Thus, the Eskimo people are almost everywhere a minority among Russians and Chukchi (the one exception being the village of New Chaplino), resulting in a sharp decline of the native languages, in particular Eskimo languages (Krauss 1976:196-98; Krupnik and Chlenov 1979:27-29; Vakhtin 1984:69-73).

From the linguistic point of view, there is a continued strong Chukchi influence, possibly due to intermarriage. Since the beginning of the Soviet regime, there has been considerable Russian lexical influence, as evidenced by the numerous unassimilated Russian words found in the Soviet dictionaries and pedagogical works (Hammerich 1954:418; Krauss 1976:198). Knowledge of the English language has completely disappeared (Krupnik and Chlenov 1979:29). There even seems to have been an attempt to replace in the literature the old English loanwords by the corresponding Russian words. As a result, CSY from the SFE has become a little harder to understand for SLI people.

On SLI, I would postulate that there has been a gradual recession of Chukchi linguistic influence, as well as a recession of the awareness of Chukchi words, due to the intermixture of the latest Siberian clans with the other clans and the loss of contact with Chukchi speakers. For instance, Chukchi words are felt to be genuine Eskimo words, and younger SLI speakers are totally unaware of their origin. Some less frequent words are not even known to these younger speakers, but older speakers

might refer to them as "Siberian" or even "slang" (GOL-pc). Only the oldest generation might be aware that they are "reindeer herders'" (= Chukchi) words.

Actually, a decline in the knowledge of Chukchi and a lack of awareness of the Chukchi origin of words are also apparent in the present SFE (Krupnik and Chlenov 1979:29). Menovshchikov (1986:75) observes that each particular layer of borrowed vocabulary has been perceived by subsequent generations of CSY speakers as an inherent part of the language. It is likely, however, that SFE native speakers could still identify the origin of the most recent layer of loanwords, but this ability has almost disappeared on SLI. Incidentally, the disappearance of recognizing Chukchi borrowings has even affected Soviet scholarship; Mudrak's reconstructions (1986:233, 235-37) of "Proto-Asiatic Eskimo" contain four cognate sets that are actually Chukchi loans.

Nowadays, outside linguistic influences on CSY are mainly Russian loanwords as far as the SFE is concerned and English loanwords as far as SLI is concerned. In children's speech, one occasionally notices extensive lexical borrowing of CSY and Russian in the SFE and CSY and English on SLI. In the following Soviet example, a CSY base is used in a Russian sentence and with a Russian inflectional ending (Vakhtin 1985:43):

- (1) Ja éto niivaju?
 --- --- niive-aju?
 I it pour-1st.person.singular.present
 (Russian) (Russian) (CSY) (Russian)
 'Do I pour it out?'

According to Vakhtin, sentences like the above were used by a Russian-dominant five-year-old child when speaking to its mother, who preferred to speak Eskimo even though she also knew Russian.

In SLI, there are only a few English-dominant young children, and here the borrowing occurs in the other direction, in that English words or collocations are incorporated into Eskimo structures. The following is a striking example by a five-year-old boy. He was addressing his fully bilingual and also Eskimo-dominant mother, but I was also present, so he might have put in the English for my benefit:

- (2) Around and around-engllaghnaqunga.
 around and around-ngllagh-naqe-unga
 (English)-make.N-PROSP-IND(1s)
 'I am going to make circles (while drawing).' (NBK/5-34)

On SLI, such utterances are discouraged by parents and are much rarer in adult speech. The different direction of lexical borrowing certainly corresponds to the relative vitality of CSY on SLI, as compared to the SFE.

Multilingualism, at least by the middle of the nineteenth century, was more widespread among the Naukanski and the Sirenikski than among the CSY because they were language minorities, even within the Eskimo context. So, Naukanski-Imaklikski bilingualism was traditional among the Naukanski as was Sirenikski-CSY bilingualism among the Sirenikski. Considering also the non-Eskimo languages present in the area at the end of the nineteenth century and at the beginning of the twentieth, it was not uncommon to find Naukanski-Imaklikski-Chukchi-English quadrilingualism among the Naukanski and Sirenikski-CSY-Chukchi-English quadrilingualism among the Sirenikski (Krupnik and Chlenov 1979:25, 27-28).

The history of Naukanski is similar to that of CSY, but less well known in that there is some uncertainty as to its earlier geographical distribution (Menovshchikov 1975:187; Krauss 1985:187, [1986]:19). It is relatively isolated, and its closest relationships appear to have been with Imaklikski and Chukchi areas, rather than with Eskimo areas farther to the south. The Chukchi influence on Naukanski has been significantly stronger than on CSY (Krupnik and Chlenov 1979:26; Menovshchikov 1986:70). Despite the removal of the population of the original Naukan village near East Cape, it is reported that the Naukanski people still strive to maintain their language (Krauss 1979:820).

Chukchi linguistic influences seem to have been the strongest on Sirenikski; it is geographically less protected from Chukchi territory than the more central CSY area (Krupnik and Chlenov 1979:26). Unlike Naukanski, it has also been in close contact with CSY (including SLI people) for a long time. It is probably significant that there were at one time immigrant speakers of Sirenikski on SLI (the last competent one died in 1969) (Krauss 1976:189). In the mid-eighties, I was able to find some elderly speakers of SLI who could still remember a few words of Sirenikski, occasionally confused with Chukchi (Jim Toolie, Nick Wongtittlin, personal communications). However, I never met anyone who knew some Naukanski. Sirenikski is now on the verge of extinction (Krupnik and Chlenov 1979:25, 27, Vakhtin 1984:70).

Imaklikski (Big Diomed Inupiaq) demonstrates apparent extensive contacts with Little Diomed and Naukanski; it has a few Chukchi loanwords, which it probably acquired via Naukanski. As noted in chapter 1, section 1.1, Imaklikski is now virtually extinct.

There also appear to be fewer English loanwords in Imaklikski than in the other SFE Eskimo languages. This might be due to the fact that the Diomed Islands were

less often visited by ships during the whaling period. Several loans, like *manik* 'money', *pamun* 'pump' (see de Reuse 1994), must have been borrowed via Naukanski. However, there is at least one Imakliksi loanword, *paypaq* '(smoking) pipe' (Menovshchikov 1980:286), that is not found in any other language from the SFE and might have been borrowed at a later date, maybe via an Alaska Eskimo dialect. CAY has the loan *paipaq* (Jacobson 1984:276), and I suspect that the Inupiaq dialects of North Alaska have similar forms.

In conclusion, CSY seems to have been linguistically subordinated to Chukchi, for most, but not all, of its history. The contacts and linguistic influences are old and were constantly going from west to east, crossing over, in more irregular waves, to SLI as well. I hypothesized that the amount of borrowing from Chukchi was about the same in SFE and SLI until the whaling period and that then there was a still more extensive interpenetration in the SFE, but a stationary influence on SLI. After the fall of the czarist regime and the end of the whaling industry in the area, Chukchi interference has remained high in CSY of the SFE, possibly becoming even higher, but one must expect a gradual lessening of this interference on SLI, due to intermixture between older and newer (Siberian) clans and termination of direct relationships with Chukchi speakers.

5.2. Cultural Evidence for Chukchi and Eskimo Linguistic Contacts

In material culture, the details of Chukchi and Siberian Eskimo dress, hairdo, and style of tattooing were identical in many respects (Sverdrup 1978:30-31; Hughes 1984:247, 1984a:252-53, 265). Eskimos of the SFE and SLI also shared with the Chukchi a cultural emphasis on physical exercise, including long-distance running and weightlifting (Moore 1923:363-65; Geist 1936:26; Hughes 1960:90-19; Sverdrup 1978:83-86).

The cultural influence of Chukchi on CSY is also apparent in CSY clan names, and to some extent in place-names (see subsection 5.2.1 below). Many CSY personal names are borrowed from Chukchi (see subsection 5.2.2 below). The meanings of names of stars and constellations are also almost always equivalent in both languages (Bogoras [1901]:87; Vdovin 1961:50).

There were also numerous similarities between the Eskimo and the Chukchi in religion and ceremonialism (Hughes 1984a:256, 265, 273), in mythology (Bogoras 1913:421, 424, 431), and in folklore (see subsection 5.2.3 below).

5.2.1. Evidence in CSY Clan and Place-Names

Asiatic Eskimo social organization differs from that of other Eskimo groups in that it includes a system of patrilineal clans or lineages, each with, at least originally, its own area of residence or origin and its own distinctive religious rituals. Also implied were particular social and working obligations among its members (Hughes 1960:249-69, 1984:244, 253-54). Clan names often refer to the village of origin of its members, the village that is "owned" by the clan (Moore 1923:340; Hughes 1984a:267). Some confusion over the precise number and names of clans is apparent in the literature and in information given by present SLI speakers. This is probably because some clans are divided into subclans and the name of a subclan is often given as the name of a clan and also because of partial ignorance of the classification of clans from the SFE. On the basis of the published lists (Moore 1923:340; Hughes 1960:251-52; for Gambell, Walunga 1987) and unpublished information (Krauss, for Gambell; Shinen, for Savoonga; Linda Badten, personal communications 1992), I have constructed the following tentative and conservative list for SLI as of the middle of the twentieth century. The number 1 indicates the village(s) of residence (with an attempt to put the village with the largest number of clan members first) and 2, the village of origin, if known:

Aemagagomeit, spelling according to Hughes (1960:252), interpreted as *Amagaghmiit* by Krupnik and Chlenov (1979:24), 1. Gambell, Savoonga, 2.?

Aghnaghtat, 1.?, 2.?

Aghpuuget, 1. Savoonga, Gambell, 2.?

Allngughaat, possibly a subclan of the *Aymaramket*, 1. Gambell, 2.?

Amigtuughet, 1. Savoonga, Gambell, 2.?

Avatmiit, 1. Savoonga, Gambell, 2. *Avan* (CSY *Avan*), SFE.

Avereveraaghet, possibly a subclan of the *Pugughileghmiit*, 1. Gambell, 2.?

Aymaramket, 1. Savoonga, Gambell, 2. *Chaplino* (CSY *Ungaziq*), SFE.

A'iyaaghet, possibly related to the *SanighmeInguut*, or a subclan of the *Aymaramket*,
1. Gambell, 2.?

Ighneghilnguut, possibly related to the *Aymaramket*, 1. Savoonga, 2. eastern SLI.

Ingleghnaghmiit, 1. Gambell, 2. *Ingleghnaq*, SFE; a subclan of the *Ungazighmiit*
according to Hughes (1984:248).

Laakaghmiit, 1. Gambell, Savoonga, 2. SFE.

Kiwatangaghmiit, 1. Savoonga, 2.?

Meregtemiit, 1. Gambell, 2. *Meregta*, a site four miles east of Gambell; a subclan is
Nangupagaghmiit, 1. Gambell, 2. *Nangupagaq*, a campsite east of *Meregta*,
and *Qayillghet*, a nearby site (Apassingok et al. 1985:204).

Napakutaghmiit, 1. Gambell?, 2. *Napakutaq*, a village on Yttigran Island, SFE,
abandoned about 1934 (Hughes 1984:248).

Nasqaghmiit, probably a subclan, 1. Gambell, 2. *Nasqaq*, a site on SLI, east of
Nengiighhaq.

Nengiighhaghmiit, probably a subclan of the *Amigtuughet*, 1. Gambell, 2. Ningeekak
(CSY *Nengiighhaq*), a camp approximately ten miles southeast of Gambell.

Pakagmiit, spelling according to Hughes (1984:254); possibly a subclan of the
Laakaghmiit, 1. Gambell, 2. SFE.

Pugughileghmiit, 1. Gambell, Savoonga, 2. Powooiliak (CSY *Pugughileq*), a village
east of Southwest Cape; a subclan is *Nokaegomeit*, according to Hughes's
(1960:250) spelling, 1. Gambell, 2. a campsite near Powooiliak; another
subclan is *Pungughmiit*, 1. Gambell, 2. Punuk (CSY *Punguuk*) Islands, off
the eastern coast of SLI.

Punguqusighmiit, maybe the same as the *Pungughmiit*? 1. Savoonga, 2. Punuk
Islands?

Qateghyighaat, 1.?, 2.?

Qiwaaghmiit, 1. Savoonga, Gambell, 2. Kivak (CSY *Qiwaag*), SFE.

Qureghaat, possibly a subclan of the *Ungazighmiit*, 1. Gambell, 2. SFE ?

SanighmeInguut or *SanighmeIngughmiit*, sometimes distinguished from the *Aymaramket* and apparently sometimes considered a subclan; the two are certainly closely related, since they held some ceremonies together (Apassingok et al. 1985:209), 1. Gambell, 2. Chaplino (CSY *Ungaziq*), SFE.

SayghutiInguut, possibly a subclan of the *Pugughileghmiit*, 1. Savoonga, 2.?

Ugaliit, 1. Gambell, 2. north end of the modern site of Gambell. This clan seems to have constituted the original *Sivuqaghhmiit* or inhabitants of Gambell (CSY *Sivuqaq*) (Hughes 1960:250).

Ungazighmiit, 1. Gambell, 2. Chaplino (CSY *Ungaziq*), SFE.

Vuuvghet, 1.?, 2.?

Some of the smaller clans of Gambell cited by Hughes (1960:252), the *Aemagameit*, *Nasqaghhmiit*, and *Ugaliit*, might not exist at the present time. According to Collins (1937:18) the *Ugaliit* clan was composed of nine people in 1930; Geist (1936:11) states that there are only two of the original "*Sivuqaghhmiit*" (original Gambell settlers) left, and Hughes (1960:250), reporting on the 1955 situation, writes that there is one "*Sivuqaghhmiit*" left; it is unclear whether Geist and Hughes also mean to refer to the *Ugaliit* or to still another clan. Nowadays, *Sivuqaghhmiit* refers to residents of Gambell or to SLI people, as opposed to people not from SLI. More uncertainty arises when this list is compared with the SFE clan list in Krupnik and Chlenov (1979:21-24). In their classification, clans are first named and grouped according to the area or village they originally resided in, then for each area or village a list of clans and subclans is given. I will not here repeat the complete classification, since it is not relevant to my purpose, but merely point out some interesting similarities and discrepancies. In the SFE, the *Nangupagaghhmiit* are not a subclan but a separate clan, not closely related to any other; the *Pakagmiit* are a subclan of the *Laakaghhmiit*. The names *Avatmiit*, *Qiwaaghmiit*, and *Ungazighmiit* refer not so much to clans as to larger geographical groups of clans. For example, the *Ungazighmiit* group comprised ten clans, some of which are extinct now. It is

interesting to note that some names of the SFE *Ungazighmiit* clans are identical to full-fledged SLI clan names; these are the *Aymaramket* (pronounced *Armaramket* in the SFE; see chapter 6 for a discussion of the etymology of this name), *Laakaghmiit*, *Sanighmelnguut*, and *Ugaliit*. Within the *Ungazighmiit* list, it is apparently also possible to make intermediate geographical groupings of some of the clans, based on demonstratives.

Names based on demonstratives can, of course, vary according to the relative location of each group, and a lot of uncertainty can arise when they are used as designations of nongeographically bound groups. The situation is relatively clear with the term *Unegkumiit* ('people of the seaside', according to Krupnik and Chlenov [1979:22], probably derived from the demonstrative *un'g-* 'the one down there' [Badten et al. 1987:246]) which refers to the set of *Armaramket* and the *Sanighmelnguut*, but can also be a synonym for the *Armaramket*. This corresponds well to my earlier observation about a special relationship between the *Aymaramket* and the *Sanighmelnguut*. Another one such intermediate term, *Pagalighmiit* ('people of the northern side', from the demonstrative *pag-* 'the one up there; the one to the north' [Badten et al. 1987:143]) is especially confusing. On SLI, it seems to be used as an equivalent of, or a subclan of, *Aymaramket* (Jim Toolie, personal communication), and the *Punguquighmiit* are maybe also called *Pagalighmiit*, or a subclan of them. But according to Krupnik and Chlenov (1979:22), they are a clan of the *Avatmiit* and also a subgroup of clans within the *Ungazighmiit*, containing, along with three others, the *Ugaliit*, but not the *Aymaramket*, *Sanighmelnguut*, or *Laakaghmiit*.

It is clear that there are, nevertheless, a lot of correspondences between clan names of the SFE and SLI. This does not necessarily mean, of course, that all the clans with corresponding SFE names are immigrants to SLI. Thus, the *Nangupagaghmiit* of the SFE preserve a tradition that their ancestors came from the site of *Nangupagaq* on SLI (Krupnik and Chlenov 1979:23-24). The *Ugaliit* have been said to be the founders and therefore the original "owners" of the site of Gambell (Moore 1923:340), and therefore it is also likely that the *Ugaliit* of the SFE are immigrants from SLI. The most recent immigrant clans from the SFE are (at least for Gambell [Hughes 1960:252]) the *Avatmiit*, *Laakaghmiit*, and *Ungazighmiit*; other clans that are presently known to be relatively recent immigrants from SFE are the *Aymaramket*, *Napakutaghmiit*, *Qiswaaghmiit*, and the *Sanighmelnguut*.

In order to appreciate the potential linguistic influence of clans from the SFE in SLI, one must consider the clans that are numerically the most important and therefore the most powerful. These are presently the *Aymaramka* (and *Sanighmelnguut*), *Meregetemiit*, *Pugughileghmiit*, and *Qiswaaghmiit*. Of these, only the *Meregetemiit* and

Pugughileghmiit are considered autochthonous. However, there is a possible Chukchi connection with one of these, since *Meregtemiit* might contain the Chukchi form *məragta* 'to the right' (Krause 1980:104). One would still have to explain the meaning of this term in the geographical context, and the similarity could of course be purely coincidental.

As far as the toponymy of SLI is concerned, the Chukchi influence is much less considerable, since the large majority of SLI place-names are clearly Eskimo, indicating that SLI has always been settled by Eskimos. This contrasts with the SFE situation, where many place-names are Chukchi and where every Eskimo village had two names, a Chukchi one and an Eskimo one (Gerland 1883:207). Some SLI sites with Chukchi place-names appear to be based on personal names of people who are known to have come from Siberia. An example is Camp Kulowiya, near Northeast Cape, named after *Kalawiyi* from the Siberian *Aymaramket* clan. If the place-name of Chukchi origin is also a clan name, as is possibly the case for *Meregta*, origin of the *Meregtemiit* (as seen above), a Siberian origin cannot be proven, since clans are named after place-names, and not the other way around. It might well be the case that all place-names of Chukchi origin on SLI are recent. It is appropriate to note at this point that, even though I have emphasized the importance of CSY immigration from the Siberian mainland, I have not provided evidence that the CSY people are originally from the SFE. Actually, the Russian scholar S. A. Arutjunov has argued that CSY is native to SLI and intrusive in the SFE, thus leaving Sireniki to the west, bypassing Naukanski to the north and east (Krauss 1985:182). However, the possible absence of old Chukchi place-names on SLI does not constitute evidence for this position either, since the ancestors of the CSY people might have migrated from the mainland to the island before the Chukchi ever came in contact with them.

5.2.2. Evidence in CSY Personal Names

The occurrence of Eskimo personal names of Chukchi origin is another indication of the cultural influence of Chukchi on CSY. According to Krupnik and Chlenov (1979:26) at least half of CSY personal names in use in the SFE have Chukchi etymologies. A few of such names from the SFE are explained in Vdovin (1961:56). These names can usually be easily identified due to their typically Chukchi morphological and phonotactic characteristics. I give below a fairly complete list of such names in use on contemporary SLI, compared with some names from SFE sources. Given that there are about 1,100 SLI people, this list provides a precise but not exact indication of the proportion of people with names of Chukchi origin since many people have several Eskimo names and, in a few cases, several

people have the same name. The precise Chukchi etymology of all these names is not usually obvious and will take a long time to determine. Therefore, I have postponed a complete etymological study as a topic for further research. Only a few Chukchi etymologies are given in the list, which is also ordered according to final phoneme sequences that will probably turn out to be of morphological significance.

Names ending in ...*en* are the largest group and certainly contain the absolutive singular suffix *-(ə)n* (Skorik 1961:148), and can be subdivided further.

Ending in ...*gergen*, or ...*gerngen*: Saywegergen (from Ch. *Caywəkulgəŋ* 'walking' according to Rubtsova [1954:162, 172], but this cannot be correct, since the Ch. form violates vowel harmony by having /a/ and /u/ in the same word), Yatgergen (cf. Ch. *Yátirgin* [Nordquist 1883:224]), Galaagerngen, Tengaagerngen. ...*gergen* is probably from the suffix *-gərg-*, which forms abstract nouns from verbs 'cause, source, object of an action', followed by the absolutive suffix (Bogoras 1922:801; Skorik 1961:328); I am not sure about the analysis of ...*gerngen*.

Ending in ...*aawen*, ...*ngaawen*, ...*nganwen*, or ...*iiwen*: Aakaawen, Gimankawaawen, Kawaawen (cf. Ch. *Kawaw* [Krause 1980:62]), Mitiitaawen, Qutwhaawen, Uggaawen, Yugraawen; Angqangaawen, Ayngangaawen, Emqangaawen, Emqilngaawen, Gimangaawen, Imengaawen, Inyiyngaawen, Nutelengaawen, Qirgengaawen, Pangaawen, Singaawen, Talaanngaawen, Temlengaawen, Tengaangaawen, Tuyetngaawen, Umrengaawen, Yagrangaawen; Angqatennganwen, Imaghliiwen, Qamaliiwen, Tenmiiwen.

Nutangaawen, the name of the fox in some CSY *ungipaghaatet* (SLb-7) is also the name of the fox in Chukchi tales: *Nuterjəwət* (Polinskaja and Nedjalkov 1987:252).

Ending in ...*telen*: Uwetelen, Wangqetelen (contains Ch. *warqət* 'walrus tusk' [Moll and Inénlikéj 1957:20], Yatelen (cf. Ch. *Yéttelen* [Nordquist 1883:224], *Yéttlin* [Bogoras 1922:701]).

Others ending in ...*(e)n* are Atargen, Aymergen, Aywergen, Eneqaan, Insaqen, Kegyuuqen, Kumkelqaangen, Lumen, Maasqen, Quwaaren, Saalan, Tagriigen, Taangyan, Tiguyngen, Uumken (cf. Ch. *úmkin* [Nordquist 1883:221], *u'məl'ən* [Moll and Inénlikéj 1957:141] 'fat'), Wesqegen.

Another group of names ends in ...*nga* or ...*ngan*: Alanga, Awliinga, Aygenga, Emenga (Menovshchikov 1986:129), Kaynga ('brown bear', see chapter 6, subsection 6.2.1.2), Kemliinga, Mekenga, Mulenga, Payanga, Qipenga, Quunnga, Raktenga or Regtenga, Ratwhenga, Retgunga, Tiwlanga (also in Bogoras [1913:447], Walanga, Wesqenga; Angetangan, Mekakangan. In most of these names, ...*nga* is probably the Chukchi absolutive singular suffix *-ŋ* (Skorik 1961:150) or maybe the Kerek absolutive singular suffix *-ŋə* (Skorik 1961:151). According to Vdovin

(1961:56), names ending in *-nga* refer to females only; as far as SLI names are concerned, this seems to be correct for most, but not all, names.

A third group of names ends in *...yi*, usually preceded by *...ug...* (from *...uw...*?) or *...aw...*: Anaghay, Etugyi, Gugugyi, Kalawyi, Kemugyi, Nutawyi, Pangawyi (spelled Pangawgyi in a SFE source [Menovshchikov 1986:128]), Pelgugyi, Tagrugyi [Menovshchikov 1986:128], Temwawyi, Waaghyi. The sequence *...wyi* apparently corresponds to *...wgi* or *...wge* (according to vowel harmony) in Chukchi names such as Kórage (Nordquist 1883:224), Qutúwgi (Bogoras 1922:709). It is interesting that an underlying sequence *...wy...* is not permitted in Chukchi surface phonotactics and becomes *...wg...* on the surface (Bogoras 1922:652-56); however, there is no such constraint on *...vy...* (corresponding to Ch....*wy...) in Koryak (Bogoras 1922:674). This is not a very conclusive piece of evidence for Koryak influence on CSY, however. Again, I have not been able to find information on the morphological significance of *...wy...*; there is, however, a possibly related plural suffix *-wgi* or *-wge* (depending on vowel harmony) in certain Koryak dialects (Bogoras 1922:695). It is not specified what dialects these are; from Bogoras's forms, I would infer that they are Kamenski or Parenski. In the Chavchuvenski or literary dialect this suffix is *-wwi*, *-wwe* (Zhukova 1972:129-34).

The group below is a list of the remaining SLI personal names which are likely to be of Chukchi (or Alutor, Kerek, Koryak?) origin. As in the above lists, one will notice the phonotactics more typical of Chukotan languages than of CSY, in particular the frequency in many positions of /e/, /l/, /r/, /t/, /w/, and /y/ and the existence of sequences *kg*, *kwh*, *twh* and sequences of vowel and semivowel within the same syllable in *ay*, *aay*, *aw*, *aaw*, *iw*, *uy*: Amwaari, Aaygu, Ayveta, Emayaala, Emeghaaya, Emkawa, Enteggaq, Eriiqu, Esikwha, Iirgu, Ketekesi, Kiruka, Laaghlú, Laspina, Lugtu, Malaawi, Ngawra, Peru (cf. Ch. Péru [Nordquist 1883:224]), Qakgi, Qaawmaluk, Qawyaalek, Raaspa, Rugaani, Semsaaýwa (see also Bogoras [1913:450]), Semyu, Sewhaari, Siingpa, Sumusi, Taayqa, Tawrisa, Tiiweri, Uumki, Wapelu, Wayengi, Yaaghu, Yamani, Yapelu, Yaari.

5.2.3. Evidence from CSY Folklore

In some Siberian Eskimo *ungipaghaatet* or traditional tales, it was apparently not uncommon to find lines (songs or magic formulas) in the Chukchi language. This may indicate that the stories themselves had been borrowed from the Chukchi; and it is true that in many cases the story is known to the Chukchi. It is also likely that the existence of such lines provides us with some information about the prehistoric sociolinguistic situation. As mentioned earlier, the Chukchi were in a position of

power with respect to the Eskimos, since they were more numerous and since the Eskimos depended on them for trade. As a result, the Eskimos probably saw their Chukchi neighbors and their language as threatening and somewhat mysterious, and might have expressed this feeling by having the stranger or more ridiculous protagonists of their tales, such as some animals or people with shamanistic powers, talk in this strange language. Similar phenomena occur in the folklore of other groups, such as the Nootka of the Northwest coast (Sapir 1963). The Chukchi lines were pronounced with a marked Eskimo accent and were understood by the listener, so that no important and potentially humorous piece of information would be lost. It is also usually possible to find versions of the same story with the relevant lines in plain Eskimo.

An example (3) of such Chukchi lines is found in a tale in which a small fish that was teasing a big reindeer is taken out of the water by it and cries out to it (Menovshchikov 1976:32). Menovshchikov has not analyzed the lines, nor even indicated what Siberian Eskimo language they occur in (I assume it is Naukanski, owing to the presence of /e/), and my knowledge of Chukchi is insufficient to check on the Chukchi equivalents he provides.

- (3) Qēnyuánpōlqāw qēnyuánpōlqāw
Yākōrgān kekvatgu pēkātkañ kēkvātgu!

'Throw me in the water, throw me in the water,
(my) mouth is drying out, (my) tail is drying out!'

For the first word, Menovshchikov gives the Chukchi equivalent *kinenpōlqew*, an inflected form of *pōlqetōk* 'to fall in water' (Moll and Inénlikéj 1957:102). The first word on the second line is the Chukchi stem *yākōrg-* 'mouth' (Bogoras 1922:647), with the absolutive ending as in *yekērgin* 'mouth' (Nordquist 1883:215), not found in Moll and Inénlikéj (1957). For the second word on the second line, Menovshchikov gives *kēkwatg'e*, a form of *kēkwatōk* 'to wither, dry out' (Moll and Inénlikéj 1957:55). The third word on the second line contains the same stem as in the Chukchi forms *paqarelgān*, singulative *peqerit* 'flipper, fishtail', *peqōrgerēl* 'tail (of bird or plane)' (Moll and Inénlikéj 1957:98, 104). Another version of this tale, from Rubtsova (1954:104), has the corresponding lines in CSY; the translation is mine, from the CSY text, with divergencies in Rubtsova's Russian translation indicated in parentheses and R:

- | | | |
|-----|--|---|
| (4) | Papasquqa tukrugtaa,
metengtanka tukrugtii,
uvinka tukrugtaa,
qaanqa tukrugtaa. | 'My (not in R: little) tail is drying out,
my dorsal fins are drying out,
my skin (R: trunk) is drying out,
my mouth is drying out.' |
|-----|--|---|

In several variants of one *ungipaghaan*, I have encountered lines of "magic words" spoken by a giant. These "magic words" are used for bending and straightening a pole that has a parka attached at the top, in which five little girls the giant has captured earlier are kept prisoner. A list of the "magic words" in the various mostly unpublished SLI sources is given in 5, followed, if published, by the reference and, if unpublished, by the name of the storyteller and the year of recording in brackets:

- (5) Unaa qukaa-aa, unaa qugetwhaa. (Golodergen [1985])

Uunaaqikaa, uunnaaqikaa, uunnaaqugutgun (or) uunnaaqugutkun.
(Rookok [n.d.])

Unaqekaa, unaqekaa, una qugetgen. (Seppilu [1985])

Unaa, qekanga, unaa qugetwha! (Slwooko 1979:8)

Unaqeka, unaqeka, una qugetgaq (variants: qugetgen, qugetga) (Toolie [1985])

Uunaaqekanga, uunaaqekanga. (Wongittilin [1985])

These lines are totally meaningless to SLI speakers. The words look like Chukchi to some extent, but they are garbled to the point that I have been able to postulate a Chukchi origin for only one of them. The word with the forms *qugetga(q)*, *qugetgen*, or *qugetwha* appears to contain the Chukchi stem *wetg-* 'straight', occurring for example in the Chukchi verb *wetgatok* 'to become straight' (Moll and Inénlikéj 1957:28), the imperative prefix *q-* (Bogoras 1922:738), and unidentified suffixes. It presumably means 'straighten up!'

The evidence for this interpretation can be found in Chukotan versions of the same tale, since one would expect the "magic words" to be translatable in these. Versions of this tale in Chukchi and Koryak have probably been recorded, but I have not yet found them. Two Koryak versions are given in Jochelson (1905:181-82,

212-16), but in English translation only. Two versions of this tale in Kamchadal (Itel'men), a Paleo-Siberian language very distantly related to Chukotan, were collected by Jochelson in 1910-11. They contain the following lines of "magic words" (in Jochelson's spelling):

- (6) Ūé, qwétwatge.
'Tree, straighten up.' (WR-195)
- Ué, ué, qwétwawc.
'Tree, tree, become straight.' (WR-228)

These lines evidently contain words borrowed from Koryak. In Worth's Kamchadal dictionary, the lexical items of Koryak origin are unfortunately not distinguished from original Kamchadal words. ūé 'wood', according to Worth (1969:270), might be from Koryak *uttəut* 'wood' (Zhukova 1980:200); qwétwatge or qwétwawc, containing the stem *wetw-* 'straight', according to Worth (1969:277), must originally be from Koryak *veth-* 'straight' (Bogoras 1917:122), cognate to the Chukchi stem given above.

It is also not clear whether these lines should be considered Kamchadal with lexical items borrowed from Koryak or whether the whole line was directly borrowed. Their Koryak morphology (i.e., the Koryak imperative prefix *q-* [Bogoras 1922:738]) points to the second possibility. However, Kamchadal has probably borrowed some morphology from Koryak, since it was known to have undergone extensive lexical and grammatical influence from Koryak by Jochelson's time (Bogoras 1922:641). In any case, these lines were readily understood by Kamchadal speakers, owing to the fact that all Kamchadals also spoke Koryak.

Versions from the SFE (7 and 8) usually contain two different lines, the first used by the giant to bend down the pole in order to attach the parka full of little girls to it, and the second one, in order to straighten it again:

- (7) Unaqegkanga, unaqegkanga! (or.)
Unaqegkangat, unaqegkangat!
(...)
Villaqegkanga, villaqegkanga! (ME-32, 34; vowel length not marked.)
- (8) Unaaqekanga, unaaqekanga!
(...)
Taklakekanga, taklakekanga! (RU-114-15)

These "magic words" are also mysterious in SFE versions, but at least in Rubtsova's version there is a recognizable Eskimo root in one word, which apparently corresponds to the Chukchi forms *qugetga(q)*, *qugetgen* or *qugetwha* occurring in the SLI versions: *taklakekanga* contains the postural root *taklagh-* 'spread out; stretched out' (Badten et al. 1987:221); the morphology following it is unclear. It is possible that the final element *...kanga* is a TRP(3s-3s) (Transitive Participial mood) inflectional ending, as might be shown by the variant *unaqegkangat* in Menovshchikov's version, where *...kangat* could be a TRP(3p-3s) ending. Still another version of this tale, recorded by Bogora(z)(s) (1949:158-60, [1901]:62-64) with a Chukchi translation, unfortunately does not contain any "magic words".

A version of this tale has also been recorded in King Island Inupiaq, a dialect very closely related to Imakliksi. Here, there are no "magic words" addressed to the pole, but later in the story, a little girl calls out in the form of a song to brothers who are on their way to rescue her. The song starts with the following apparently meaningless lines, but the similarity of these to the Chukchi words referred to above might not be coincidental even though they are out of context:²

- (9) Juuwuutkuuwuu,
Juuwuutkuuwuu, (FO-94)

Apart from songs and words in tales, the Siberian Eskimo ability for code switching is also demonstrated by the plain mixture of Chukchi and CSY words in songs. Bogoras (1913:438) gives a small song beginning entirely in Chukchi, except for one word, and ending in a line which is a quotation of something said by Eskimo women, entirely in CSY, except for one word.

² Still farther away from the SFE, there exists a Kobuk River (Malimiut) Inupiaq version of this tale (Zibell 1970:13-20). In this version, the meaningless lines corresponding to *Juwuutkuuwuu* of the King Island version are

Huka-huka-mii ...
Huka-huka-mii ...

It is wholly impossible to tell whether these are somehow related to lines in the King Island Inupiaq or CSY versions.

5.3. Trade Jargons in the Chukotka and Bering Sea Area

Cases of pidginized Chukchi or Eskimo in the Chukotka area have never before been mentioned in the literature on pidgins and creoles. This is because the evidence for the existence of Chukchi or Eskimo jargons would have to be searched for on the Chukotka coast, and this is an area as yet unexplored by Soviet linguists interested in pidgins and creoles and presently not accessible to the Western pidgin and creole specialists.

There is linguistic and historical evidence that there were several simplified trade languages in the area under discussion that I feel contributed toward the spread of Chukchi influence on CSY.

The expression "simplified trade language" refers to an elementary semicodified linguistic system that is nobody's first language and that has often been called a "trade jargon." A more precise definition of a jargon is given by Silverstein (1972:622-23), who points out that a difference must be made between a "language community," which implies a shared and essentially identical grammatical system, and a "speech community," which does not imply such a shared system and where communication is made possible by simplifying or avoiding some of the differences between two distinct native grammatical systems and using a set of universal linguistic principles. Thus, there is a jargon speech community, but there is no jargon language community. I prefer not to use the term *pidgin* since this is often used to refer to more codified and elaborate systems. Well-known examples of such trade languages include Russenorsk, based on Norwegian and Russian and to a lesser extent on Low German, Lappish, and Swedish (Fox 1983:97-104; Broch and Jahr 1984), and Chinook Jargon, based on Chinook, other Northwest coast Indian languages, French, and English (Silverstein 1972:378-406, 596-623). As far as Eskimo is concerned, a form of jargon has been documented for North Alaska (Stefánsson 1909:217-32) and in a more anecdotal fashion for Western Canadian Inuit (de Poncins 1965), for Aivilik (Eastern Canadian) Inuit (Gilder 1881:304-5), for Southern Labrador Inuit (Dorais 1980), and for Greenlandic (Petersen 1979:113-14).

There is historical evidence that the Chukchi had special language-simplifying skills. The Chukchi, especially in the first and second periods described in section 5.1, consistently preferred speaking their own language to outsiders; therefore, it would have been natural for them to simplify their language in order to make it easier for outsiders to learn some of it. In an arctic expedition (1848-49), reported by Hooper (1853:33), the Chukchi were met in Plover Bay, and in attempting to communicate, "they [the Chukchi] did not learn English nearly so quickly as many of us acquired their tongue." As Chukchi is typologically very different from English,

one can have serious doubts as to the nature of the Chukchi acquired so fast by English speakers. The Swedish explorer Nordenskiöld, reporting on the Vega expedition (1878-79), is more perceptive, and notes that "the difficulty of studying the language was increased, to a not inconsiderable degree, by the Chukchi in their wish to co-operate with us in finding a common speech being so courteous as not to correct, but to adopt the mistakes, in the pronunciation or meaning of words that were made on the Vega" (1882:369). In the course of time, the natives also learned some words of Swedish, and so an international lingua franca was gradually formed, in which some of the crew members became very proficient. It was very poor in words, and "all grammatical inflections were totally wanting" (1882:371, 386). Nordquist (1883:211), who was the linguistic investigator for the same expedition, regrets that he could not obtain more morphological information on the language, since the Chukchi would use the words in the same way they heard them used by the members of the Vega's crew, thereby causing the formation of a jargon.

The Eskimos of the area certainly had similar language-simplifying skills, since the existence of Eskimo-based jargons is recorded for the whaling period; these jargons are further discussed below. In keeping with the main topic of this chapter (i.e., the relationship between Eskimo and Chukchi), the question is whether jargons were used before Euramerican contact for communication between various groups of Eskimo speakers and the Chukchi. It is possible that the appearance of Eskimo-based jargons was directly or indirectly caused by white contact, since the economic advantage recently gained by Eskimos in trading with whalers might have prompted the Chukchi to learn, at least imperfectly, some Eskimo instead of requiring the Eskimo to learn some Chukchi or at least Chukchi jargon in the traditional pattern. But considering the prehistoric linguistic diversity and various types of multilingualism involving Chukchi, CSY, Sireniski, Naukanski, and Imakliksi (Krupnik and Chlenov 1979:25-26), it is more likely that the above circumstances only contributed to the further diffusion of Eskimo jargons that already existed before white contact. The correct historical scenario is impossible to determine, since the earliest accounts date from white contact.

The historical evidence for the existence of Eskimo jargons in the SFE is mainly anecdotal. It is striking that the early accounts that deal with the Chukchi do not fail to note that Eskimo was also spoken in the area, but was mixed with Chukchi or contained many Chukchi words (Hooper 1853:35; Nordenskiöld 1882:459). In present times, it is not at all obvious, at least to the untrained observer, that there is such a significant Chukchi influence on CSY. The above observations could mean that in the first half of the nineteenth century, Eskimo of the SFE simply contained a lot more Chukchi loans than it does now. It is also likely that beside their own

languages the Eskimos used an Eskimo-Chukchi jargon to converse with the Chukchi and other outsiders and that it is this jargon that the accounts refer to as Eskimo mixed with Chukchi. Dall's account of Alaska Territory is probably the first work to explicitly mention this possibility: "There is reason to believe that there was originally a jargon, containing words of both languages, in use in communication between the men of the two races, as is at present the case near Norton Sound, between the Innuit and the Indians" (1870:378).

Dall also speculated perceptively on the Eskimo language itself: "Communication is constantly kept up between the Chukchees and the Tuski [=Siberian Eskimo], and our knowledge of the language of the latter is still too meager to enable us to say whether among themselves they yet speak a pure Orarian [=Eskimo-Aleut] dialect, but it is probable that it has become, from constant intercourse, permanently mixed with Chukchi words" (1870:378). We are now certain that the lexical influence of Chukchi on SFE Eskimo languages has become permanent, and we are left with the questions of what this jargon was like and how and why it disappeared, as is implied by Dall's wording "there was originally a jargon" in the quotation above.

Actually, it is not even certain that all traces of an Eskimo-Chukchi jargon have disappeared. Krupnik and Chlenov (1979:22) note that the *Qiwaaghmiit*, a CSY group from Kivak, have close relationships with people of the neighboring maritime Chukchi settlement of Chechen, and as a result of intermarriage with them spoke a mixed Eskimo-Chukchi jargon in the beginning of the twentieth century. The same authors (1979:23) also report that the CSY *Nunaghmiit* group, originally from Nunak, south of Naukan, that had merged by the end of the nineteenth century with the Naukanski, also spoke a kind of Eskimo-Chukchi jargon. Unfortunately, sources and exemplification are not provided.

For linguistic evidence for such jargons, one must turn to a careful scrutiny of the early word lists. Since there are no connected texts, there is considerable uncertainty as to what they represent. According to Krauss (1975:45), there are about fifteen word lists that were collected on the Siberian mainland before 1900. Of these, I have been able to examine in some detail two, both written by Americans: Dall (1870:549) and Wells and Kelly (1982:67-72), originally published in 1890. As with all such early lists, the translation of many words is inaccurate, the spelling is inconsistent and difficult to interpret, and typos are very common.

The authority given for Dall's list is "Hall (part)." This must indicate that the list is part of a longer vocabulary collected by another author, but I have been unable to find a complete reference to this; Hall is probably Prof. Asaph Hall of the 1869 U.S. Eclipse expedition, who according to Dall (1870:554) collected a Chukchi

vocabulary at Plover Bay. Dall's list appears to be from the Chũ'klũkmũt, probably the *Siklughmiit*, a group of CSY speakers of Yttygran Island, SFE. It contains thirty words, twenty-five of which are clearly recognizable CSY nouns and numerals. The remaining five are clearly from Chukchi; they are the independent personal pronouns goom 'I', from Ch. *gām* (Moll and Inénlikéj 1957:33); goot 'you', from Ch. *gāt* (Moll and Inénlikéj 1957:35); en'kau 'he, she, or it', from Ch. *ənqen* (Moll and Inénlikéj 1957:148); this is probably a typo for en'kan, the spelling occurring in Hall's Chukchi vocabulary (Dall 1870:552); and the particles ee 'yes', from Ch. *ii* (Moll and Inénlikéj 1957:39), and al'eah 'no', from Ch. *etlā* (Moll and Inénlikéj 1957:158). It is remarkable that the nouns and numerals are from CSY and the pronouns and particles from Chukchi, but of course in such a short list this peculiarity might be due to coincidence. The Wells and Kelly (1982) longer list helps elucidate this matter to some degree.

Dall (1870:410) and Stefánsson (1909:217) note that vocabularies of whalers' and traders' Eskimo jargon have been published as studies of genuine Eskimo. Unfortunately, none of them give references. There is good evidence that Wells and Kelly's *English-Eskimo, Eskimo-English Vocabulary*, first published by the U.S. government in 1890, is one of these works. This booklet actually contains two separate vocabularies, both with an Anglo-Eskimo and an Eskimo-English section; the first vocabulary (pp. 29-66) is basically North Alaska Inupiaq, and contains approximately 2,260 words. It appears to contain some phonologically and morphologically simplified words, but also many inflected forms. On the whole, the words are not nearly as simplified as in Stefánsson's 1909 vocabulary. This is probably because Stefánsson's intent was to describe a jargon, whereas Wells and Kelly's was to give a list of actual Eskimo words, so one would expect them to leave out all foreign-looking words. They did leave in some rather suspicious words, such as ab'abah 'to speak' (p. 42), of unclear origin but possibly Hawaiian according to Stefánsson (1909:22); kok'o 'hard bread' (p. 30), from Hawaiian pidgin English, further discussed below; koone'a 'wife' (p. 45), from Danish via Greenlandic (Stefánsson 1909:226). There are also two unassimilated Russian loanwords: chy 'tea' (p. 40), (cf. Russian *čaj*, but Imakliksi *sayuq* [Menovshchikov 1980:294] and Alaskan Inupiaq *saayu* [Larry Kaplan, personal communication]) and do'bra 'sufficient' (p. 49), from Russian *dobro* 'good'. There also appears to be one word of Chukchi origin tin'oop 'silver-black fox' (p. 34), also occurring in CSY and Sirenikski (see the list of Chukchi loanwords in chapter 6).

If the first vocabulary of Wells and Kelly is, at least partially, a jargon, it is reasonable to assume that the second vocabulary (pp. 67-72), entitled "Eskimos in Siberia, from Cape Behring to East Cape," contains a similar type of Eskimo. This

second vocabulary, much shorter than the Inupiaq one, contains 354 entries in the English-Eskimo section, to which must be added four entries of the Eskimo-English section not found in the English-Eskimo section. Of this total of 365 words, I have been able to identify the origin of 281 with some degree of certainty; 84 thus remain obscure, but will probably turn out to be from Chukchi. Of the words with a determined origin, 185 are from CSY, 76 are from Chukchi (of which 16 are also Chukchi loans into CSY), 10 are from Sireniksi, and 6 are probably from Inupiaq. One might wonder whether there are also Naukanski words in this list. Because Naukanski is generally phonetically close to CSY, and because of the atrocious spelling of the words, it is often impossible to tell whether a word is CSY or Naukanski. In most cases of ambiguity, such as *stoke* 'fingernail' (p. 68) (cf. CSY *estuk* [Badten et al. 1987:60] and Nauk. *situk* [Menovshchikov 1975:474]), the spelling points to a CSY word. Words that are probably Naukanski are *ahmeta'too* (p. 67), *ahme'ta* (p. 69) 'ermine', Nauk. *amitatuk* (Menovshchikov 1975:394), but it could also be Sireniksi *amitatugg* (Menovshchikov 1964:209); CSY has *amikluk* (Badten et al. 1987:31); *imp'net* 'cliff' (p. 67), Nauk. *əpnaq* (Menovshchikov 1975:506), rather than CSY *pennaq* (Badten et al. 1987:156); *im'uk* 'water' (p. 69), Nauk. *əməq* (Menovshchikov 1975:503), rather than CSY *meq* (Badten et al. 1987:115); *mun'tuk* 'black skin' (p. 67), 'whale meat' (p. 71), Nauk. *mantaq* (Menovshchikov 1975:445), rather than CSY *mangtak* 'edible whale skin' (Badten et al. 1987);³ and *toon'too* '[rein]deer' (p. 72), Nauk. *tuntu* (Menovshchikov 1975:484), rather than CSY *tungtu* (Badten et al. 1987:235). One should also keep in mind that some of the above words could also be CAY from a phonetic point of view, so if we assume that CAY was included in the vocabulary, the evidence for Naukanski would be reduced to 'cliff', 'whale skin', and 'deer'.

One has here an interesting mix of Chukchi and various Eskimo languages. It is legitimate to ask whether the compiler was aware that there are several languages in his vocabulary, and whether the mixture was the responsibility of one and the same consultant. There are in this vocabulary many examples of the same English word with translations in the various languages, but usually involving genetically unrelated and therefore phonetically dissimilar forms. I give some examples, providing the origin of the word, but, for the sake of brevity, without giving the native language equivalents in phonemic spelling:

³ There are actually some CSY speakers on SLI who say *mantak* instead of the more widespread *mangtak*.

(Page 67)	Bear, white [i.e., polar bear]	room'ka (< Ch.) naw'ook (< CSY)
	Bear, brown	pahkin'ok (< Sir.) kainga (< Ch.)
	Big	nemain'kin (< Ch.) ong'are (< CSY)
	Coat	crin (< Ch.) at'kook (< CSY)
	Deer	toomtoo or toon'too (p. 72) (< CSY or Nauk.) toom'ta (< Sir.) korong'a (< Ch.) ilwil'loo (< Ch.)
	Eat	ningum'eta (< Ch.) neg'a (< CSY)
(Page 68)	Hair (human)	kitswe'a (< Sir.) noo'yok (< CSY) noo'ya [< CSY, with AB(3s-s) inflection]
	Man, native	yoke (< CSY) kol'loun ('woman' [p. 70]) (< Ch.)
	Marmot	seek'eeek (< CSY) anuk'keo (< Sir.) e'li (< Ch.)
(Page 69)	Raven	kwil'wit (< Ch.) muttuk'look (< CSY)
	Walrus	i'wok (< CSY) chit'chu (< Ch., female pronunciation [Comrie 1981:244])

Obviously, several consultants were involved. It is difficult to imagine that the compiler would not notice that different and even genetically unrelated languages are involved here; apparently he did not care. Also apparent is that a lack of concern for the precise number of languages spoken in an area is characteristic for a trade jargon in a unstabilized stage. The trader (or in the case of this vocabulary, the collector) will memorize (or write down) several different words with the same meaning if that appears useful for trade over a large area. The jargon speaker will of course not bother to distinguish (or write down) phonetically similar cognates, as these will be considered to be the same language. Thus, it is as hard as it is to distinguish Naukanski from CSY in this vocabulary because the compiler never noticed or cared to notice the difference.

It is clear that the number of Chukchi loanwords in this vocabulary is much larger than the number found in any contemporary Eskimo language; as in Dall's vocabulary there are also qualitative differences in the words that are not Eskimo. So, in Wells and Kelly the particles are also from Chukchi, even though they are not the same as in Dall: *ki'wa* 'by-and-by' (p. 67), Ch. *qeywe* 'it is true, really', also in CSY as *qaywa* 'wait!; consider before proceeding!' (Badten et al. 1987:179); *wing'a* 'no', Ch. *uyŋe* 'no; there is no', also reported in jargon Chukchi as *uinga*, *ouinga* (Nordenskiöld 1882:387, 411, 488). The pronouns in Wells and Kelly are rather problematic: there is *oowung'a* 'me' (p. 68), apparently from Inupiaq *uwaŋa* (MacLean 1980:74); *pung'a* 'mine' (p. 68), of unknown origin; *hum'neen* 'mine' (p. 68), Ch. *gəmnin* 'my' (Moll and Inénlikéj 1957:33); *oomungh'am* 'we' of unclear origin, perhaps from Sir. *menga* 'I' (Menovshchikov 1964:53); *shu'pa* 'you' (p. 69), probably from Sir. *elpi* (Menovshchikov 1964:53), rather than from CSY *elpek* (Badten et al. 1987:56); *hun* 'you', and *hun'yun* 'yours' (p. 69) respectively from Ch. *gən* 'you', and Ch. *gənin* 'your' (Moll and Inénlikéj 1957:33).

That the particles are from Chukchi in both vocabularies and that the pronouns are only from Chukchi in Dall and from Chukchi and non-CSY Eskimo languages in Wells and Kelly is very intriguing, and could hardly be due to chance. Again, the best explanation is that both vocabularies are in an Eskimo-Chukchi jargon and that, in this jargon, the particles were taken from Chukchi. Since independent pronouns are more commonly used in Chukchi than in Eskimo, it would also make sense for a jargon, which is more analytic than Eskimo and therefore needs independent pronouns, to borrow them from Chukchi. It is less clear why there are also some independent pronouns from Eskimo in Wells and Kelly. One might conjecture that the Inupiaq form was borrowed from an Inupiaq jargon from Alaska and that Sireniki, like Chukchi, uses its independent pronouns more often than occurs in other Eskimo languages and that as a result these were taken over by the jargon.

Another piece of evidence that Wells and Kelly contains a jargon is the fact that a few Eskimo word combinations are not ordered in the usual way. In CSY a modifying noun most often follows the modified noun, but in this vocabulary, as in Chukchi and English, the sequence is modifying noun plus noun. The examples are

- | | | | |
|------|--|--|-----------------------------|
| (10) | sukalu' uke 'bad man' (p. 67); CSY | *seghleq
seghlegh-Ø
bad-ABs | yuuk
yug-Ø
person-ABs |
| | tow'illery-yoke 'black man' (p. 68); CSY | *tagnelghii
tagnegh-ighii-Ø
be.black-INP-ABs | yuuk |
| | kot'illery-yoke 'white man' (p. 68); CSY | *qatelghii
qategh-ighii-Ø
be.white-INP-ABs | yuuk |

The preferred CSY forms would be *yuuk seghleq*, *yuuk tagnelghii*, and *yuuk qatelghii*. The expressions *yuuk tagnelghii* and *yuuk qatelghii* are also suspicious since they look like calques of the English ethnic designations *black man* and *white man*; the correct CSY ethnic terms are *Pureki* (see this chapter, section 5.1) and *Laluramka* (see chapter 6, subsection 6.2.1.1), and do not contain a reference to color.

During the whaling period the Eskimo-Chukchi jargon was influenced by contact with the crews of U.S. or European whalers' ships. On some of these ships various pidgin varieties were spoken. Gerland (1883:207) mentions an ungrammatical jargon based on Chukchi and Eskimo, mixed with Russian, Hawaiian, and English, that was used as a lingua franca at the time.

There is linguistic evidence that English-speaking whalers must have taught a variety of pidgin English to the Chukotka natives. Whympers (1868), in a generally reliable travel account of Alaska and Chukotka in 1865-66, gives the following words and phrases of "broken English" uttered by Chukchi natives:

- (11) (about the engine of the ship:)
Too muchee wheel, makee man too muchee think! (p. 91)
- (referring to objects as well as human beings:)
What's that fellow? (p. 91)

donkey engine 'ship's engine' (p. 91)

(explanation on the telegraph:)

S'pose lope fixy, well -- one Melican Plower Bay, make talky all the same San Francisco Melican. (p. 92)

(on eating meat with pepper sauce:)

Me sabe good deal, but me no sabe white man eat fire on meat. (p. 121)

too muchee 'too expensive' (p. 122)

The phrases in (11) show features typical of many varieties of pidgin English. For example, the following also occurred in the now extinct Chinese pidgin English: postconsonantal word-final /i/ in *muchee*, *makee*, *fixy*, *talky*; /l/ for /r/, as in *lope*, *Melican*, *San Flancisco* (Hall 1944); the following feature occurs in Melanesian pidgin English or Tok Pisin: *fellow* as an affix marking attributive adjectives (Mühlhäusler 1986:153-54). There are other features more widespread and in Chinese pidgin English as well as in Tok Pisin: *make* as some type of all-purpose auxiliary, as in *make talky*; *all (the) same* 'like'; *s'pose* 'if'; and *sabe* 'to know'. Concerning this last word, another geographical account reports that the "corrupt Spanish" expressions *mi savi* 'I know', *mi no savi* 'I don't know' are generally known around Plover Bay (Das Ausland 1882:904). Schuchardt (1980:15) points out that they are actually pidgin Portuguese picked up by the whalers somewhere in the South Seas and used in English-based pidgins. It is thus likely that the above phrases are examples of a ship's jargon that was codified farther south and that it is an ancestor of present-day Pacific varieties of pidgin English.

Two English words recorded only in nineteenth-century Chukchi are probably also from whaler's pidgin English and refer to goods commonly obtained from whaling ships. The word *ram*, or *lum*, from "rum", but referring to any type of liquor, is often quoted as well known to the Chukchi (Whymper 1868:115; Das Ausland 1882:905; Nordenskiöld 1882:367, 402, 403, 412). Nordenskiöld (1882:471) notes that the Chukchi used the word *calico* to refer to a shirt of seal gut or cotton cloth. This word is attested in Inupiaq trade jargon: *ka'-lī-kō* 'any kind of knitted or woven stuff' (Stefánsson 1909:225); it apparently entered North Alaskan Inupiaq as *kaliku* 'cloth' (MacLean 1980:19).

Travelers' accounts also often mention the presence of Hawaiian words in such whalers' jargons. In the period during which whaling ships stopped in Hawaii (1819-80, with a peak in activity between 1840 and 1860), Hawaiians often served as

crew members on the whaling ships (Drechsel and Makuakāne 1982:464; Holm 1986:269).⁴ Hawaiian words specifically noted for the SFE coast were *kaukau* 'food' and *pau*, in Hawaiian 'ready, finished', but said to mean the same as uinga 'nothing, there is no' among the Chukchi (Nordenskiöld 1882:388, 412; Das Ausland 1882:904, Birgham 1883:20). *Kaukau*, actually Hawaiian pidgin English for 'to eat', originally from Chinese, was already considered a genuine Chukchi word by Nordquist (1883:208), and has become so completely assimilated in Chukchi that it occurs in the Soviet dictionaries: *kawkaw*, *kewkew* 'ship's biscuit, rusk, small loaf, bread' (Moll and Inénlikéj 1957:50, 59). The Chukchi scholar Inénlikéj (1978:77) notes that this word is more widespread in coastal Chukotka, as one would expect, but incorrectly assumes that its origin is onomatopoeic. Surprisingly, *kaukau* is not recorded for any SFE Eskimo language, even though it is well attested in the Inupiaq trade jargon (Wells and Kelly 1982:30; Murdoch 1892:55; Stefánsson 1909:226). An exhaustive list of Eskimo jargon words with Hawaiian etymologies is given in Drechsel and Makuakāne (1982:462-64).

It is not impossible that there was also a type of Russian-based jargon in use in the SFE in the nineteenth century. This could explain why Nordenskiöld (1882:372, 404) mentions that the Chukchi spoke "broken", "very unintelligible", or "exceedingly defective" Russian. However, Nordenskiöld was referring to Chukchi groups that lived a considerable distance west of the Eskimo villages, so it is unlikely that CSY speakers were ever in contact with Russian-Chukchi jargons.

The English-based jargons used by whalers disappeared with the end of the whaling period, about 1900, and the Eskimo or Chukchi jargons probably disappeared a little later, with the loosening of trade relationships between Chukchi and Eskimo and the establishment of English and Russian schools in the area.

Nowadays, at least on SLI, the existence of Eskimo-Chukchi jargons is completely forgotten. In the course of my own fieldwork, I asked some of the oldest people from SLI what they knew of the Chukchi language. Nick Wongittilin (personal communication), who has never been to the SFE, could remember only a few Chukchi words and phrases, pronounced with a very heavy Eskimo accent; he pointed out, however, that when the Chukchi attempt to speak Eskimo, they throw in a Chukchi word when they do not remember the Eskimo equivalent.

As a conclusion to this section, I posit that in the course of history there have been at least three, and maybe four, unstable trade jargons in use by CSY speakers on

⁴ The important role of whaling ship crews in the diffusion of pidgin Hawaiian and Hawaiian pidgin English across the Pacific has been emphasized by Bickerton and Wilson (1987:62) and Day (1987:166-67).

the western shore of the Bering Sea: (1) an Eskimo-based jargon, used for communication with the Chukchi and other Eskimo groups, containing many Chukchi loans, in particular particles and personal pronouns; (2) a Chukchi-based jargon, mostly simplified Chukchi, used for communication with outsiders; (3) a whaler's jargon, probably English-based, with Hawaiian and Portuguese words, used by and with ships' crews only; (4) maybe a Russian-based jargon, primarily for trade with Russians and probably never used in the easternmost part of Chukchi Peninsula. This is of course an idealized classification; in reality, these four types of jargon were not kept distinct, and there were probably intermediaries between the four types. Furthermore, in no case is there evidence that the trade languages represented here developed into something as stable as a pidgin.

For the purposes of the discussion in chapter 6, my demonstration of the earlier existence of an Eskimo-Chukchi jargon is crucial.

Chukchi Loanwords in CSY and Their Influence on CSY Morphology and Syntax

There are more than two hundred loanwords from Chukchi in the Eskimo languages of the SFE, most of which also occur in CSY as spoken on SLI. Among these loanwords, over a hundred (i.e. slightly more than half) are uninflectable particles, including sentence adverbs, conjunctions, and interjections, which thus form a remarkably large class. The remaining loanwords are inflectable words. The large majority of these are nouns, but there are also a few verbs.

It has been stated in the Soviet literature that Eskimo has borrowed not only from Chukchi but also from Koryak or from dialects of Koryak, a closely related Chukotan language spoken in an area south of the Chukchi area. This is an interesting claim, since it tells us something about the sociolinguistic situation at a time when Eskimo was spoken much farther south. Section 6.1, is a survey of Chukotan dialectology, and provides the evidence for Koryak loans in CSY.

The phonology and morphology of Chukchi loanwords in CSY is a promising line of research, but since it is somewhat peripheral to the main topic of this work, I do not discuss it beyond the remarks in section 6.1; an overview of the most straightforward correspondences can of course be gained from comparing CSY and Chukchi forms in the lists in this chapter (see also Menovshchikov 1967:271, 1986:66). Likewise, I consider an examination of Chukchi phonological influences on the CSY phonological pattern to be beyond the scope of this work. Some of these phonological tendencies have been described by Krauss (1985:188-90). An additional example of Chukchi phonological influence on CSY is the strong regressive labialization of /ɣ/ when followed by /u/, resulting in the loss of the /ɣ^w/ versus /ɣ/ contrast before /u/. A similar loss of contrast occurs in at least some Chukchi dialects, involving /w/ and /ɣ/ before /u/ or /o/. Examples are *gopqə* or *wopqə* 'moose' (Kenstowicz 1986:83; Moll and Inénlikéj 1957:22, 31) and *guygun* or *wuywun* 'log house' (Moll and Inénlikéj 1957:22, 32). Since cases of labialization that are certainly not due to Chukchi influence also occur in CAY (these tend to be progressive labialization of velars after /u/ [Woodbury 1981:49]), one has to consider the possibility of an influence in the other direction, of Eskimo on Chukchi. However, given that Koryak has *wepqan* 'moose' and that the Chukchi forms with

/w/ also occur in Western Chukchi dialects not in contact with CSY is evidence against this possibility.

Lists of the Chukchi loanwords identified for CSY are provided first for nonparticle loanwords (subsection 6.2.1.1) and then for particle loanwords (subsection 6.3.2), with full etymologies and introductions explaining the conventions used. In section 6.4 is a list of Eskimo words that appear to have been borrowed by Chukchi. Section 6.5 offers an explanation for why there is such a large proportion of particle loanwords from Chukchi in CSY. Section 6.6 compares the functions of CSY postbases and particle loanwords and explores some ways in which these particles have modified CSY syntax and morphology. Finally, in section 6.7 are some conclusions for a theory of contact-induced typological change and for autolexical syntax.

6.1. The Evidence of Chukotan Dialect Variation

In order to trace more precisely the location of Chukotan-Eskimo linguistic contact, it is necessary to examine what precise Chukchi or Koryak dialects might have had an influence on it. To this end, it will be useful to discuss the state of Chukotan dialectology in some detail.

Even though there exist extensive descriptive accounts of the standard (literary) dialects of Chukchi (Skorik 1961, 1977) and Koryak (Zhukova 1972), as well as some of the lesser known dialects (e.g., Palanski Alutor [Zhukova 1980]), progress in the area of Chukchi-Koryak dialectology and comparative linguistics has been relatively limited since Bogoras's (1922) account of the differences between Chukchi, Koryak, and Koryak dialects among themselves. A comprehensive and detailed account is still needed.

Traditionally, the Chukotan languages have been divided into a Chukchi group and a Koryak group, but since Bogoras (1922) it has been clear that this distinction is more a cultural and political one than a linguistic one. In particular, it has been noted that there is very little dialectal differentiation within Chukchi, but a rather large amount in the Koryak group, even though the area they reside in is much smaller than the Chukchi one. The explanations are most probably that the Koryak expansion into the area they occupy presently is older than the comparable Chukchi expansion and that they are more sedentary than the Chukchi (Comrie 1981:242).

In addition, there has been a lot of disagreement about where to classify the two most divergent "dialects" of Koryak: Alutor, spoken in some villages around Alutor Bay on the northeastern coast of the Kamchatka Peninsula (Mel'chuk and Savvina 1978:5, the Koryak II of Bogoras 1922) and Kerek, spoken far to the east of the other

Koryak dialects, near Cape Navarin (Jakobson 1942:605). Bogoras (1922:640) considers them to be divisions within Koryak; some authors have considered Alutor to be a dialect of Chukchi; and for some time, Kerek was considered to be a dialect of Chukchi and Alutor to be a dialect of Koryak. Such decisions were apparently made on the basis of very limited sets of linguistic data.

Skorik (1958) made the first effort to base a classification on accurate word lists and comparisons of sounds and some morphology; he concludes that it is pointless to try to decide whether Alutor and Kerek are more like Chukchi or Koryak and establishes them as separate languages on a par with the Chukchi and Koryak. Since 1968 this view has been widely accepted in the official Soviet literature (Comrie 1981:240). The following is Skorik's (1958:34-35) classification of languages and dialects in full, with my added commentary, since some of the dialect names will be relevant to our discussion of contacts with Eskimo.

I. Chukchi language, with five dialects:

a. Uelenski or Eastern; the literary language (Skorik 1961:13);¹ the village of Uelen is just north of East Cape and thus very close to Eskimo territory; it is reasonable to assume that the Eskimos have borrowed words from this dialect. However, the villages of Enmylen and Nunligran are also very close to Eskimo territory, being located on the southern coast of the Chukchi Peninsula, about fifty miles from the Eskimo village of Sireniki. Skorik (1961:13, 1977:324) refers to dialects or subdialects spoken at Mechigmen and Yandrakinot, even more centrally located in the original CSY area. It is thus not clear precisely what Chukchi dialects CSY speakers were most influenced by.

b. Pevekski or Western

c. Enmylinski

d. Nunligranski

¹ The internationally known Chukchi writer Yuri Rytikheu is originally from Uelen.

e. Khatyrski; these two last dialects are also morphologically differentiated, not just phonologically (Skorik 1961:12; Moll and Inénlikéj 1957:176-85). Of note is that Khatyrski is spoken in the Kerek area, much farther south than the others. This is apparently not the only dialect spoken in what is traditionally considered "Koryak territory"; Vdovin (1962:162-64) describes a variety of Chukchi (Vayegski) spoken on the Vayegi river, a southern tributary of the Anadyr, which shows a marked Koryak influence. The dialects discussed so far do not appear to correlate with the distinction often made in the literature between Maritime and Tundra Chukchi. There is a lot of confusion in the early accounts concerning the difference between Maritime (also called Coast, Fishing, or Sedentary) Chukchi and Tundra or Reindeer (Nomadic or Inland) Chukchi.² Both these groups were apparently not differentiated dialectally, were closely related by marriage, and would occasionally practice each other's occupation. The difference was much more one of temporary economic convenience than a cultural and linguistic one (Gerland 1883:199, 217-19; Sverdrup 1978:217).

2. Koryak language, with five dialects:

a. Chavchuvenski; the language of the reindeer-breeding Koryak (which make up almost half of the Koryak), the basis of the literary language

b. Apukinski, more closely related to the above than to the below

c. Kamenski

d. Parenski; this and the preceding dialect represent the Koryak I of Bogoras (1922)

e. Itkanski

3. Alutor language, with three dialects:

² The Siberian Eskimo were often not distinguished from the Maritime Chukchi, and apparently the Maritime Chukchi themselves did not always make the distinction in terminology (Hughes 1984a:258). It appears, however, that the difference was rather rigidly maintained, since there was originally very little intermarriage between Chukchi and Eskimo.

a. Alutor proper

b. Karaginski

c. Palanski; this and the preceding dialect are spoken on the neck of the Kamchatka Peninsula; Palanski is considered a Koryak dialect by Zhukova (1980:11-12); the justification is apparently that Palanski has better-preserved vowel harmony than both Alutor proper and Karaginski, which is a feature it shares with Chavchuvenski.

4. Kerek language, with two relatively divergent dialects:

a. Khatyrski

b. Majna Pil'ginski

The two most recent comparative works of Chukotan dialectology are Zhukova (1978), a very short survey concentrating on sound correspondences in Koryak and Alutor dialects, and Skorik (1986), a comparative description of Chukotan noun morphology. Both works contain paragraphs on Eskimo influences on Chukotan sound systems; this topic is further treated below.

One of the often given sound shibboleths involves the sonorants /r/ and /y/. Chukchi has /r/ and Chavchuvenski Koryak (the most widespread dialect) has /y/. The other languages most often have either /r/ or /y/, too (Bogoras 1922:668-69; Skorik 1958:22; Zhukova 1978:79). Thus, 'reindeer' (in the absolutive singular) is Chukchi *qoraŋa* (Moll and Inénlikéj 1957:65), Alutor proper *quraŋa* (Meščuk and Savvina 1978:7), Alutor (Karaginski and Palanski dialects) *qoraŋa* (Zhukova 1978:80, 1980:205), with intervocalic /r/, but Kerek *quyaquy* (Skorik 1958:22) and Koryak (Chavchuvenski and Kamenski dialects) *qoyaŋa* (Bogoras 1922:708, 730; Zhukova 1972:47), with intervocalic /y/. This word was borrowed as *quyngiq* in CSY. Since this word is the only one that has a /y/ for the expected Chukchi /r/, one can consider it the obvious candidate for Koryak influence on Eskimo. Thus, according to Badten et al. 1987:197, it must be a loan from Koryak, because of the presence of /y/. (It could also be a loan from Kerek, but this is less likely because the Kerek form does not have a final /ŋ/ and instead forms its absolutive by partial reduplication [cf. the final syllable *quy*]). There is also a CSY form *qerenga* 'large old reindeer (in folktales)' (Badten et al. 1987:183), which I assume to be a more recent loan from Chukchi.

One should however take into account that in CSY there are cases of prenasal alternation of /y/ with /r/. This phenomenon is somewhat reminiscent of the alternations between /l/, /r/, /y/, and /z/ (and their voiceless equivalents) found in some postbases. Examples from chapter 2, subsection 2.5.3, are -*mlaagh-*, -*mraagh-*, -*mzaagh-*, -*mleghagh-*, -*mreghagh-*, -*mzeghagh-*, -*vlaagh-*, -*vraagh-*, -*vzaagh-*, -*vleghagh-*, -*vreghagh-*, -*vyeghagh-*, and -*vzeghagh-* 'to V a little, to hardly V', and -*ngeltagh-*, -*ngertagh-*, -*ngestagh-* 'to V in small movements' (list section B. 1.2). Such alternations are not strictly phonologically conditioned, but are more likely to occur in certain positions, such as after a labial nasal or voiced fricative (in the postbases) or before a nasal (in the Chukchi loanword). Another example of a Chukchi loan where this alternation occurs is the compound name designating a clan existing on SLI and in CSY, but apparently originating from the Chaplino (CSY *Ungaziq*) area in the SFE (Krupnik and Chlenov 1979:22)). It is given as *Aymaramka* by the members of that clan on SLI and as *Armaramka* for the SFE (Krupnik and Chlenov [1979:24], who even correct Hughes's [1960:251] spelling *Aimaramka* for the SLI name). However, spellings pointing to *Armaramka* also occur in an older SLI source (Moore 1923:340), with the rather unclear spelling *Avhrumah'rumkut*, and in an account of a trip to Chaplino by an elderly SLI speaker, (*Armaramket*, with plural inflection [Angi et al. 1975:61]). The first part of this compound means something like 'never afraid, anyone of them', according to Hughes's consultants (1960:251); this meaning corresponds well with the Chukchi forms *ermewək* 'to become a strong man', *ermecən* 'the strongest; strong man; hero' (Moll and Inélikéj 1957:157-58); note /r/; the second part, *ramka*, is a Chukchi loan corresponding to Koryak *ya'mkin* (Bogoras 1922:691), and is given in the list in subsection 6.2.1.2. Thus, it is clear that *Aymaramka*, like *Armaramka*, must be derived from a Chukchi word and not from a Koryak word, since in Koryak /r/ does not occur at all except in Russian loanwords (Bogoras 1922:669).

I suggest, then, that Eskimo-internal dialectal variation is responsible for the variants *Armaramka* and *Aymaramka* and that in the same fashion there was earlier an Eskimo-internal alternation between *quyngiq* and **qurngiq*, still preserved in Sirenikski *qurngeghh* (Menovshchikov 1964:188), both going back to a Chukchi *qoraŋə*.³ The Eskimo-like ending *...iq* might indicate that this is an ancient loan. To

³ The change from **quyangiq* to *quyngiq* is explicable if the Chukchi word is stressed on the first syllable (and it probably is, since Chukchi words tend to be stressed on the initial syllable); the second vowel might then have been heard by the Eskimo as an excrement vowel.

conclude, the CSY form *quyngiq* should not be counted as evidence for Koryak loanwords in Eskimo.

With respect to the possible influence of Chukotan languages other than Chukchi on Eskimo, the western coastal languages Alutor and Kerek are of particular interest because of their geographical position within the ancestral Eskimo territory (see also chapter 5, section 5.1). Bogoras (1922:666) first noted that in Kerek the /e/ of other Chukotan languages is replaced by /i/ and also observed that the Eskimo, when speaking Chukchi, have a tendency to replace /e/ by /i/, but he does not know whether there is a particular connection between these two peculiarities. In his account of Skorik (1958a), Worth (1963:351) notes that Alutor and Kerek underwent substratum influence from Eskimo, resulting in the loss of vowel harmony in both languages, and in Kerek, and to some extent in Alutor, in the loss of mid-vowels.⁴ Historically, Alutor probably arose from Chukchi, and Kerek, from Koryak, but there was also influence of Chukchi on Kerek and influence of Koryak on Alutor, thereby making the matter of possible Eskimo influences much more complicated. Zhukova (1978:82) remarks that there is insufficient knowledge of the aboriginal cultural situation to be certain about the causes of the evolution of the Alutor and Kerek vowel patterns. Eskimo influence is a possibility, but it could as well be the result of independent developments. Koryak, for example, also shows some reduction in its system of vowel harmony, but Eskimo influence is extremely unlikely in its case. In a recent article, Skorik (1986:84-85) has strongly defended the hypothesis of Eskimo

⁴ In this connection one should note, with Vdovin (1961:41-42), that very similar and maybe identical vowel changes take place in Chukchi words borrowed in CSY. Thus, Ch. /e/ is replaced by CSY /i/ or /a/ and Ch. /o/ by CSY /u/, according to the diagram in I:

(I) Chukchi vowel system:	Resulting CSY vowels in loans from Ch.:	
Neutral to harmony:	ə	ə
High series:	i	i
	e	u
	u	u
Low series:	e	a
	a	a
	o	a

One must add to this diagram: if all the vowels of a word are /e/, these always become /a/, regardless of whether these /e/ belong to the Chukchi High or Low vowel series.

influence, pointing out that the present-day Alutor and Kerek territories were once Eskimo and that the Eskimo, whose sound system does not include /e/ and /o/, replaced them respectively with /i/ or /a/ and /u/ when speaking Chukchi, the lingua franca of the area. He assumes that the Kerek, and to some extent the Alutor, adopted these pronunciations as phonetic norms from the Eskimo groups they had assimilated to. The partial loss of vowel harmony in Koryak would then be due to its vicinity to Alutor and Kerek. Note that this picture not only implies the cultural dominance of the Chukchi over the Eskimo but also an earlier cultural dominance of the Eskimo over the Alutor and Kerek. This situation is not unlikely, since the Alutor and Kerek are coastal peoples, and might have learned their marine-mammal hunting skills from the Eskimo. The present isolation of the Alutor and Kerek from the Eskimo settlements was probably caused by a later eastward and southward expansion of reindeer-herding Chukchi.

Some irregularities are not discussed here. Examples showing the different possibilities for Ch. /e/ are given in 2; full references are given in subsection 6.2.1.1:

(2)	Chukchi:	CSY:	Gloss:
	agran	aagra-	'main room of house'
	gitec'ən	gitasa-	'foresight on firearm'
	kemawek	kimaawi-	'to delay'
	retemir'ən	ratamiiragh-	'caribou skin parka'
	werqawer	wiirqa-	'snow buildup'
	yeywel	yaywaale-	'orphan'

As a result, Chukchi words pronounced with Eskimo phonology look a lot more like the Alutor or Kerek cognates than like the Chukchi forms; examples are

(3)	Chukchi:	Alutor:	CSY:	Gloss:
	e'qimil	aqimil	aqimle-	'liquor'
	lelel	lalal	lalala-	'dew'
	qetaqet	qitaqit	qitaaqe-	'salmon'
	qonpəŋ	qunpəŋ	quunpeng	'always'

It is clear that this similarity is due either to independent development or to the influence on Alutor by an earlier Eskimo substratum. It cannot be considered evidence that Eskimo borrowed the Chukotan words from Alutor rather than from Chukchi.

There are dialectal differences between Koryak and Chukchi, and within Chukchi dialects, concerning the possible deletion of intervocalic sonorants, in particular /w/ and /y/. Bogoras (1922:665, 672, 685) notes that certain intervocalic consonants are dropped by male speakers in the Kolyma district (Western Chukchi), but not by females. In Anadyr Chukchi, an Eastern variety, both forms occur in male speech and again only the fuller forms in female speech, whereas in Koryak, these consonants are never dropped. CSY loans from Chukchi, and to a slightly larger extent the Naukanski loans, do have the sonorant in most forms, as can be seen by comparing Ch. *apaapaglənən* (Moll and Inénlikéj 1957:14), CSY *apayepayiigh* 'spider'; Ch. *taaq* (originally from Russian *tabak*), CSY *tawaqa-* 'tobacco'; Ch. *puur'u* (Moll and Inénlikéj 1957:101), CSY *puuru* 'instead', but Nauk. *puyuru* (Menovshchikov 1975:322, 326, 328), and there also is a CSY variant from the SFE *puyuru* (Menovshchikov 1986:65); Ch. *wiin* (Moll and Inénlikéj 1957:21), CSY *wiin* 'not yet', Nauk. *wiyin* (Menovshchikov 1975:319).

It is to be expected that the Eskimo forms were borrowed from Eastern Chukchi, and from a variant where the fuller form predominated even among male speakers, since the trade contacts mainly involved males of each group. This situation is not corroborated by dictionaries of the modern literary Chukchi language (such as Moll and Inénlikéj 1957), which show the shorter forms only, even though they are supposed to reflect the pronunciation of males and the Eastern dialect. However, the next paragraph reveals that the standard spelling does not reflect the easternmost dialects with which Eskimo was in contact. There is also toponymical evidence that there is an area in easternmost Chukotka where the fuller forms predominate, or at least predominated in the recent past. The official Soviet river names on the map of the SFE are predominantly Chukotan, and end in ...veyem or ...vayam (according to vowel harmony), from (Chavchuvenski) Koryak or (Palanski) Alutor *weyem* 'river' (Zhukova 1980:211), or ...veem or ...vaam, from Chukchi *weem* 'river' (Moll and Inénlikéj 1957:29). Southeast of the Chukotan area, the boundary between names in ...veyem /...vayam and ...veem /...vaam corresponds fairly well to the boundary between Koryak, Alutor, and Kerek to the south and Chukchi to the north. However, in the eastern half of the Chukchi Peninsula, east of Kresta Gulf on the south shore and east of Kolyuchin Bay on the north shore, river names ending in ...veyem or ...vayam, with the intervocalic /y/, reappear.

There are also dialectal differences between Eastern and Western Chukchi concerning the position of /ʔ/ in the syllable. Kenstowicz (1986:85-86), reporting on Skorik (1958a), points out that there are two kinds of glottal stop in Chukchi, a prevocalic one and a preconsonantal one. There are no word-final glottal stops in Chukchi. The two glottal stops are distinguished phonetically in the Eastern dialect:

the prevocalic one is described as "weaker", rather an aspiration with incomplete glottal closure, whereas the preconsonantal stop is "stronger" and pronounced with a distinct glottal closure. (From a historical point of view, the Chukchi prevocalic glottal corresponds to a Koryak pharyngeal fricative, while the preconsonantal one corresponds to Koryak /q/, and there are still some synchronic alternations between /q/ and preconsonantal /ʔ/ in Chukchi.) In Western Chukchi, the phonetic contrast between the two glottal stops has been lost, and all [VʔC] sequences have metathesized to [ʔVC]. An example from Kenstowicz (1986:86) is

(1)	Koryak	E. Chukchi	W. Chukchi
Absolutive sg.	/maqəm/	/meqəm/	/meqəm/ 'arrow'
Absolutive pl.	/maqmit/	/meʔmit/	/mʔemit/ 'arrows'

It appears that the spelling of the literary (Eastern) dialect reflects neither the Eastern nor the Western dialect accurately. Indeed, the word-initial sequences [Vʔ...] and [ʔV...] are both transcribed with an apostrophe *following* the vowel, apparently, according to Skorik (1961:73), for reasons of "uniformity" in spelling. Skorik (1961:73-74) also discusses the standard ways of spelling /ʔ/ in prevocalic positions (i.e., the Cyrillic "soft sign" after /l/ and /č/, and the "hard sign" after all other consonants), but nothing is said of the spelling of preconsonantal /ʔ/ in non-word-initial positions, and no examples are given. The spelling, then, is explicitly ambiguous in one case and implicitly reflects the Western pronunciation in all other cases. This somewhat unfortunate situation probably arose because the spelling was codified by Western speakers such as P. I. Inénlikéj (Krause 1980:95), even though the literary dialect is the Eastern one.

In order to obtain information on glottal stops in the Eastern dialects that Eskimo presumably borrowed from, given the unreliability of dictionaries of the literary language, it is necessary to use the Eastern dialect recordings of Bogoras (1917, 1922). Although there are some inconsistencies in his phonetic spelling, Bogoras generally writes the glottal stop in preconsonantal position and does not mark the glottal stop in prevocalic position either because it had disappeared in this particular variety or because it was too faint (cf. Skorik's description of "weak," above) to hear.

The following are examples of words from Bogoras (1917, 1922), with spelling normalized to facilitate comparison and with forms as given in Moll and Inénlikéj (1957). Prevocalic /ʔ/ is given in 2, preconsonantal in 3.

(2)	Bogoras:	Ch. as in MO:	Gloss:
	amən	a'mən [ʔamən]	'then'
	ənkam	ənk'am [ənkʔam]	'and, then'
	ora	o'raŋ [ʔoraŋ]	'openly'
	otlaq	o'tleq [ʔotleq]	'sea lion'
(3)	Bogoras:	Ch. as in MO:	Gloss:
	le'leŋ	l'eleŋ	'winter'
	lu'rkən	l'uk	'saw; to see'
	re'nut	r'enut	'what'
	tə'lərkən	t'ələk	'is unwell; to be unwell'
	wi'rkən	w'ik	'died; to die'
	ye'ləgi	y'eləgi	'instead'
	ya'rat	y'arat	'truly'

An examination of CSY and other Siberian Yupik correspondents of the Chukchi glottal stop shows that CSY matches Bogoras's recordings rather closely. As seen in 4, which contains three forms corresponding to those of 2 above, CSY and Naukanski have zero for the prevocalic glottal stop. Full references to these forms can be found in subsection 6.3.2.

Evidence that the prevocalic glottal stop is nevertheless pronounced in the Eskimo area is provided by the Sireniskii form *purʔu* in 4; the absence of /ʔ/ in *enkam* might be due to Chaplinski influence, since Sireniskii does have a tendency to retain prevocalic glottal stops from Chukchi (Menovshchikov 1964:19). Furthermore, a Chukchi prevocalic glottal stop after /r/ appears to become /ʁ/ in some CSY loanwords (5).

(4)	CSY:	Nauk.:	Sir.:	Ch. as in MO:	Gloss:
	amen	amən	amen	a'mən	'then'
	enkaam	ənkam	enkam	ənk'am	'and, then'
	orang	--	--	o'ra	'very much'
	puuru	pu(y)uru	purʔu	puur'u	'on the other hand'

(5)	CSY:	Ch.:	Gloss:
	kagerghu-	kewir'əl	'hard frozen snow'
	paarghu-	per'uten	'appendix (anatomical)' (CSY); 'walrus gut raincoat' (Ch.)

As first noted by Vdovin (1961:47), the CSY (and also Sirenikski and Naukanski) preconsonantal correspondents to Ch. /r/ are also /k/ before a voiced consonant and /x/ before a voiceless one, thus matching the position of Chukchi /r/ as recorded by Bogoras. A list of all CSY examples in my corpus is given in 6. All Chukchi forms are as spelled in Moll and Inénlikéj (1957), unless otherwise noted.

One will note /r/ and /l/ metathesis in *alaghrang*, a phenomenon not uncommon in CSY (cf. *legra-* [Badten et al. 1987:106], *regle-* [Rubtsova 1971:437] 'to be nosy').

It is interesting that there exist identical glottal stop to fricative correspondences in occurrences of borrowing in the other direction, that is, from Eskimo into Chukchi. In 7, the direction of borrowing is uncertain for the first word (see section 6.2), whereas the two other words have good Eskimo pedigrees, and therefore must be considered Eskimo loans into Chukchi (see section 6.4).

The conclusions to be drawn from 6 and 7 are that Eskimo has been in contact with an Eastern variety of Chukchi for a long time; in particular, the Eskimo uvular fricative might point to a time when Chukchi, or its Chukotan ancestor, still had a uvular stop instead of a glottal stop. This uvular stop is still present in Alutor and Koryak, and synchronic phonologically conditioned alternations between /r/ and /q/ are present in modern Chukchi (see *təqəl*, in 6, and 1). The Eskimo might have borrowed the Chukchi word with /q/, and then have fricativized this sound before continuants, a process still occurring in some CSY dialects from the SFE and from the SLI (Krauss 1975:42, 45-46). When accounting for the forms in 7, one might postulate that both Eskimo and Chukchi formerly had /q/ where they have now, respectively, a uvular fricative and a glottal stop, since occurrences of two-way borrowing presuppose that the phonetic correspondences between Eskimo and Chukchi forms were at one point in time more transparent than they are now.

(6)	CSY:	Ch.:	Gloss:
	alaghrang	aɾ'ala	'might as well'
	ineghla-	əneel'ən	'older brother'
	qughsatku-	q'ocatko	'king polar bear'
	teghla-	təqəl	'owl'
		t'alayŋən (VDa-47)	'polar owl'
	yaghrat	y'arat	'too much'
	yaghlegi	y'eləgi	'instead'
(7)	CSY:	Ch.:	Gloss:
	nakaghya-	nik'eyen	'east, east wind'
	palughtagh-	pe'luten	'sea otter; beaver'
		Alutor paluqtan (VD-40)	
	taghyugh-	t'eyut'ey	'salt, salt water'

I will now consider the lexical influence of Chukotan dialects on Eskimo. In addition to the CSY form *quyngiq*, discussed in 6.1, there is another CSY loan in my corpus which is phonetically closer to the Koryak or Alutor form than to the cognate Chukchi form: CSY *yuwayu-* or *yugayu-*, from Ch. *yokwayo*, Alutor *yuwwayuw*, or (Chavchuvenski) Koryak *yovayow* 'loon'. The Chukchi /k/ is problematic if one wants to derive CSY *yuwayu-* from Chukchi, rather than from Alutor or Koryak; however, it can be explained if one assumes the rule of fricativization of syllable-final /k/ before a continuant that has already been referred to. One would then obtain CSY /ɣ^w/, which is probably not phonetically distinguishable from [w] or [ɣ] after /u/.

With the exception of three words, all Chukotan loans in my corpus have been found to exist either in Chukchi only or in Chukchi and Koryak or Alutor without any evidence that the word was borrowed from Koryak or Alutor rather than from Chukchi. The three exceptions are Chukotan words for which no Chukchi cognates could be found, which does not mean that they do not exist; full references to the forms in 8 are given in subsections 6.2.1.1 and 6.3.1.

(8)	Alutor:	Koryak (Chavchuvenski dialect):	CSY:	Gloss:
--		emelke	amalka	'correctly'
	aqayawka	aqayawka	qayaawagh	'hoarfrost'
	uyatik	--	yaawaati-	'reindeer sled'

amalka, an unanalyzable particle in CSY, is often given as a morphologically complex adverb in Koryak sources; however, I am not certain of the meaning of the CSY form, so it is possible that the resemblance is coincidental. The second and third words in 8 are problematic in that the Chukotan sources are given only in Vdovin (1961), a study often phonetically and etymologically inaccurate.

It would appear then, that there is very little lexical evidence for Chukotan loanwords in Eskimo that are not from Chukchi. All the particle loanwords, as will be seen in subsection 6.3.1, seem to have a Chukchi origin, with the possible exception of *amalka*.

As a conclusion to this section on the contacts of Eskimo with Chukotan dialects, one can point out that the evidence for influence, in historic times, of Chukotan other than Chukchi (Alutor, Kerek, and Koryak) on CSY remains very inconclusive. It is likely that Eskimo was never in contact with Koryak. There is some evidence, however, that in prehistoric times, when Eskimo was spoken much farther down the southern coast of what is now the SFE, there were contacts between Eskimo and Alutor and Kerek.

6.2. Lists of Nonparticle Loanwords

The reference work on Chukchi lexical influence on CSY is Vdovin (1961); however, it is incomplete and contains Chukchi and CSY words with inaccurate spellings or definitions. It is also not always clear why Vdovin considers a particular word to be a loan from CSY to Chukchi and not from Chukchi to CSY. Furthermore, Vdovin's lists contain words that are probably not to be connected, and are considered loans because of chance resemblances. In my own lists, I have taken a more cautious approach and have listed separately such extremely dubious loans at the end of subsection 6.2.1.1 and in section 6.4. My own reasons for considering a word a Chukchi loanword in CSY or a CSY loanword in Chukchi are the following in order of reliability:

1. The word has an uncontested Chukotan pedigree / Eskimo pedigree;
2. it is Chukchi-like / Eskimo-like from a phonological and phonotactic point of view;
3. it exists in the Eskimo languages of the SFE only / in Chukotan languages spoken near the Bering Sea coast only;
4. it refers to a specifically Chukotan / Eskimo item of material culture.

Loans for which the direction of borrowing is uncertain are listed below. Unless otherwise noted, all the CSY forms are found in Badten et al. (1987) and Rubtsova (1971) (abbreviated BAb and RUa, respectively). Whenever a reference to Bogoraz (1949:184) (BOg), to Vdovin (1961) (VDa), or to Inénlikéj (1978) (IN) is given, it means that these authors consider the words to be Eskimo loans in Chukchi, in my opinion without sufficient evidence.

CSY **kangkasi-** (BAb-90), **kangkasi-** (RUa-200); Ch. *keŋkeciwəmkən*, *keŋkeciġəmkən* 'whirlwind, hurricane' (MO-61; VDa-44).

CSY **kaputaghagh-** 'petrel'; also Nauk. *kaputaq* 'type of white seagull' (MEe-420), Imakl. *qepuq* 'idem' (MEb-210); compare Ch. *quputet* 'petrels' (CO-248); it is not certain whether this is related to *qupəkə*, pl. *qupəkət* 'eider-duck' (MO-67).

CSY **nakaghya-** 'east; east wind (BAb-122); southeast wind' (RUa-347); Ch. *nik'eyen*, *nik'een* (MO-82); Alutor *nəkeeyen*; also in Koryak (BOg-184; VDa-40, 45).

CSY **pagugh-** 'ripple on sea'; not in BAb; not in RUa; Ch. *pagyok* 'to fly in the wind, flutter' (MO-98; VDa-45).

CSY **pinaaqa-** 'protective marker or amulet worn on clothes'; not in BAb; attested for SLI in SLc-48; RUa-413; Ch. *penaqaġən* (MO-105), Alutor *pinaq*; also in Koryak (VDa-41, 45).

CSY **purale-**, **purare-** 'slave'; not in BAb; RUa-425; Ch. *purel*, pl. *purelti* 'farm-laborer' (MO-101; VDa-45).

CSY **qaanra-** 'small sled used in pairs for hauling boats' (always dual); Ch. *qenər* (IN-77).

CSY **qipuqagh-** 'sperm whale'; not in BAB; RUa-272; Ch. *qipuk*, pl. *qipukət* (MO-64), *qəypuk* (VDa-45); Alutor *qipuq* (VDa-40, 45).

CSY **riigta-** (BAB-198), **riigte-** (RUa-437) 'den, lair'; Sir. *ecigta* (MEb-203); Inuit *siti, sisi* (JEN-110); CAY *igta, igigta* (Nunivak) (JAb-158), *sigta* (Stebbins) (FOb); Alutiiq *nigta, ngigta* (Chugach) (BEa-44), *legta* (Kodiak) (LE-50), *igta, negta* (FOb); Aleut *cixtix* 'den, lair (of fox)'; *ixtix* 'pit; house pit' (BEa-44). According to Bergsland, these might come from Ch. *rəg-* (MO-114), Koryak *yəg-*, *cəg-* 'to dig'.

CSY **ulghaagh-** 'sea lion'; Sir. *ughelleghh* (MEb-209); Nauk. *ulghoq* (MEe-491); compare Ch. *o'tleq* [ʔotleq], pl. *o'tleqət* (MO-97), *olleq* (IN-77), *o'Laq* (BOe-687), Alutor *ulwul* (VDa-40); also in Koryak (BOg-184; VDa-45).

In the following list of words, there might be a relationship between the Chukchi and Eskimo forms, but the similarities could also be due to chance. If there is a relationship, the direction of borrowing is from Eskimo to Chukchi, except probably in the case of CSY *ketanqu-*, which does not appear to have Eskimo cognates. The Chukchi form is given first.

Ch. **kətgəntatak** 'to run' (MO-58); CSY *ketanqu-* 'to run fast', *ketanqaghagh-* 'to run around' (NBK/5-40).

Ch. **malecgən** 'rag for wiping' (MO-76; VDa-45); CSY *mallighusigh-* 'broom, bird wing used as a broom'.

Ch. **puy'epuy**, pl. *puy'et* 'soot' (MO-101; VDa-45); CSY *puyugh-* 'smoke, soot'; CAY *puyuq* 'smoke; steam, water vapor' (JAb-301); Inuit *puyuq* 'smoke from chimney' (FOb); this word has an Eskimo-Aleut pedigree (BEa-69).

Ch. **qelperak** 'to sparkle, glitter, gleam' (MO-70; VDa-44); CSY *qalmegh-* (RUa-248), *qelmegh-* (BAB-181) 'to be shiny'; CAY *qevleghte-* 'to shine, to glitter, to sparkle' (JAb-330).

Ch. **tukken** 'harpoon head' (MO-132; VDa-45); CSY *tuugkagh-*, *tuughqagh-* 'ivory; harpoon head' (BAB-231; not in RUa); CAY *tugkaraq** 'walrus tusk' (JAb-373).

Ch. **tukwen** 'edge of ice' (MO-132; VDa-45); CSY *tuvagh-* 'large stretch of shore ice'; North Alaskan Inupiaq *tuvaq* 'landlocked ice' (MC-68).

Ch. **uwik** 'body' (MO-39), also in Koryak (VDa-45); CSY *uvineg-* 'human skin; close relative; trunk, body'.

Vdovin's 1961 account also has forms which he claims are borrowings from Chukchi to Eskimo and vice versa, but where the similarities are much less convincing and, in my opinion, purely coincidental. Lists of these forms are at the end of subsection 6.2.1.1 and section 6.4.

6.2.1. Nonparticle Loanwords from Chukchi in CSY

The following list refers to Chukchi loanwords in CSY only, and not in other Eskimo languages of the SFE. An examination of the Sirenikski and Naukanski dictionaries reveals that nearly all of the words in this list have correspondents in these languages. Indeed, it appears that Sirenikski and Naukanski have even more loanwords than CSY; this is certainly due to their more extensive contacts with Chukchi, which are in turn due to their more peripheral location in the Eskimo area of the SFE.

Examples of Chukchi loans occurring in Sirenikski and Naukanski, but not in CSY are Sir. *gupqa* (Menovshchikov 1964:181, 209), Nauk. *opqaq* (Menovshchikov 1975:460), Ch. *wopqə, gopqə* (pl. *wopqat, gopqat*) (Moll and Inénlikéj 1957:22, 31) 'moose'; and Sir. *wəlgila* (Menovshchikov 1964:181), Nauk. *gulgilə* (Menovshchikov 1975:406), Ch. *wəlgil* (pl. *wəlgilti*) (Moll and Inénlikéj 1957:24) 'birch'. The phonological peculiarities in CSY, Naukanski, and Sirenikski loans strongly suggest that all three languages borrowed from Chukchi independently. Not surprisingly, there are fewer Chukchi loans in the CSY of SLI than in the SFE, but their number is still considerable. A list of CSY forms recorded for SLI could easily be compiled by eliminating from the general list in subsection 6.2.1.1 all the entries indicating "not in BAB".

In comparison, there are far fewer Chukchi loanwords in Imaklikski, and there is phonological and morphological evidence that they entered Imaklikski via Naukanski. An example of such a Chukchi loan in Imaklikski is *opkaq* (probably a typo for *opqaq*) 'moose' (Menovshchikov 1980:284), to be compared with the Naukanski equivalent given in the preceding paragraph. More Imaklikski loans from Chukchi via Naukanski are given in the particle list (subsection 6.3.1).

The loans in the list below mostly refer to cultural items from the Chukchi which were relatively unfamiliar to the Eskimo, such as reindeer herding, fur trapping, war and raiding, certain tools and games, musical instruments, intoxicants, certain foods, and types of shelter. They also include some names of animals, clans, directions, stars, and constellations.

The following conventions for references should be noted: the CSY forms are from Badten et al. (1987) (BAb) for SLI and from Rubtsova (1971) (RUa) for SFE, unless specifically noted that they do not occur in these dictionaries. Most loans are common to both SFE and SLI, but if a CSY word is not found in either Badten et al. (1987) or Rubtsova (1971), this is indicated. Spellings in forms not in Badten et al. might not be accurate for vowel length. English glosses are usually from Badten et al.

The Chukchi forms are from Moll and Inénlikéj (1957) (MO), unless otherwise noted, and page numbers are given for ease in finding forms in Cyrillic spelling and with varying degrees of vowel harmony. No precise Chukchi morphological analysis is attempted, owing to my incomplete knowledge of Chukchi morphology; Vdovin (1961:40-62) gives occasional morphological analyses, which are referred to in the list. The Chukchi absolutive plural is given when known, since the absolutive singular often has a reduplicated stem and since it is generally the case that the Eskimo word is taken from an unreduplicated form. If the Koryak (Chavchuvenski dialect) or Alutor equivalents are of interest, they are given; "also in Kor." indicates that the same word also exists in Koryak according to Vdovin's 1961 list, but is not given there.

It should be noted that this list does not include an indeterminate number of words of probable Chukchi origin that occur in Badten et al. (1987), Rubtsova (1971), Walunga (1987), and Walunga and Apassingok (1988), but for which no Chukchi correspondent was found. A few examples of such potential candidates for a Chukchi origin are *alghaarengriigh-* 'beach caterpillar' (Badten et al. 1987:26), *iimra-* 'oily broth from boiled meat' (Badten et al. 1987:77); CSY *laluwaay*, *laluwaaye-* (Badten et al. 1987:105), Sireniskii *lalu?aya* (Menovshchikov 1964:19, 189) 'dried onion'; *puurqi-* 'string beads on a short leather thong used for decoration at the closed ends of a child's garment's sleeve' (Badten et al. 1987:165); *qangaari-* 'soft spring snow that it is difficult to travel on' (Badten et al. 1987:174); *qiiyngu-* 'long reindeer hair from under the chin used in a kind of needlepoint' (Badten et al. 1987:191); *qughlaa* "Karo"-brand-type syrup (Badten et al. 1987:191); *raarwi-* 'panties' (Badten et al. 1987:198); *siseru-* 'sausage of reindeer gut filled with fat' (Badten et al. 1987:214); *taagra-* 'celebration of some sort' (Badten et al. 1987:220); *tiwlapa-* 'Eskimo dish of reindeer gut, cooked with blood and reindeer fat' (Rubtsova 1971:500); *ululaay*, *ululaaye-* 'legendary monster' (Badten et al. 1987:245).

6.2.1.1. List of Nonparticle Loanwords from Chukchi

aagra- 'main room or multipurpose area of old-style Eskimo house'; Ch. *agran* (MO-9); analysis in VDa-53, 57.

agrepe- 'colic, sudden pain in the abdomen'; Ch. *egreer* 'colic', *egrəpək* 'to suffer from colic', *egrəpələn* 'sick with colic' (MO-152; BOa-586; BOe-858, 896); according to BAB-20, from English "grippe", but this resemblance must be coincidental. Not in VDa.

alwinanga- 'broad knife looking like a scraper on a long shaft, used for working on a whale in water' (RUa-59); not in BAB; probably related to Ch. *elgək* 'to treat a skin on a board; to scrape' (MO-153). Not in VDa.

apayepayiigh- 'spider'; Ch. *apaapaglənən*, pl. *epeepegti* (MO-14), *apapelgən* (RU-195); there is a variant *epeepey* (MO-14), according to KR-139, also the underlying form. VDa-57 has CSY *apayepayek*.

aqimle- 'bottle containing liquor' (BAB-42), 'liquor, vodka' (RUa-50; VD-57); Ch. *e'qiməl*, pl. *e'qimlət* 'liquor, vodka' (MO-158); Alutor *aqimil* (VD-41); Koryak *a'qa-mi'mil* (BOe-889). The Chukchi word is often recorded in the travel and ethnographic literature and said to be the literal equivalent of "firewater" (HOO-186, 196; NO-378, 484; SV-68), but it is rather a kind of shortened form of *ä'qä'-mimil*, literally translated 'bad water' (BOe-649, 889); this analysis is also in VDa-57.

asenge- 'duty, debt; to owe, to be in debt to'; the verb is in RUa-97 only; Ch. *acəŋ*, pl. *acəŋət* (MO-15); also in Kor.; Alutor *asiŋ* (VDa-43, 57).

Atuuyllaap 'Venus, the evening star'; not in RUa; *hitol'a'apn* according to BO-87, probably *getullaapen* in the CSY orthography; not in MO. The form of the CSY word and the form and meaning of the Chukchi word are not clear; certainly related are Ch. *ŋəttol'ap* 'constellation of the Swan' (NOR-224), and *gi-to-Lap* 'Venus', literally "large eye" (BO-87). These might be related to Ch. *lələpək* 'to look, open the eyes' (MO-74), and Kor. *lələpecg'ən* 'star' (ZH). It should also be compared to *yánodl'aot* 'the star Arcturus' (NOR-224), *a'tto'oLa'ut* 'the star Arcturus', literally 'front head' (BOe-657). Not in VDa.

awenrale- 'relative; clan member' (WA-16); not in BAb; not in RUa; Ch.
awənrəl'ən 'owner, proprietor, master, boss' (MO-9). Not in VDa.

aymaake- 'limbless carcass'; Ch. *aymak*, pl. *aymakət* (MO-10). Not in VDa.

aymalqe- 'humeral or femoral bone of human or animal (RUa-37); according to BOg-183, 'humeral or femoral bone of reindeer or elk'; not in BAb; Ch.
aymalqəl, pl. *aymalqəlte* (MO-10). Not in VDa.

Aymaramket, Armaramket 'clan name'; discussed in section 6.1.; see also chapter 5, subsection 5.2.1. Not in VDa.

ayngananga- 'musical instrument; piano; phonograph'; Ch. *eyŋeneŋ*, pl. *eyŋeneŋet* (MO-158); also in Kor.; analysis in VDa-57.

esghavyu- 'grey dog' (BAb-58), 'grey, smoke-colored' (RUa-454); Ch. *cewaro*, *cewarolgən*, pl. *cewarot* 'grey, grey reindeer' (MO-142). The relationship between the Ch. and CSY forms is certain, but the phonology is unusual; BOg-183 spells the CSY form as *s'ivaŋo*, probably *sivaghu* in the CSY spelling. Not in VDa.

gaymaawi- 'to be completely engrossed in what one is doing; to use something wastefully'; Ch. *gaymawək* 'to be carried away (as in singing); to fly into a rage' (MO-29); see also the related particle in subsection 6.3.1. Not in VDa.

gerungawe- 'yellow meat fly' (VDa-58); not in BAb; not in RUa; Ch. *gər'oŋawət*, pl. *gər'oŋawətte* (MO-34); analysis in VDa-58. Probably related to CSY *nguyngaaghagh-* 'housefly' (BAb-137)

gitasa- 'front sight (aiming device on firearm)'; not in BAb; in RUa-127 and MV-48; Ch. *gitec'ən* (MO-31); analysis in VDa-58.

guunagh- 'nut'; not in BAb; Ch. *wonalgən*, pl. *wunet* 'cedar cone, nut' (MO-22). VDa-58.

guygu- 'summer house; modern wooden house'; Ch. *guygun*, *wuywun* (Western dialectal variant) 'isba' (MO-22, 32; KR-146), *wui'gun* 'fortified log-house' (BOe-889). VDa-58.

ineghla- 'friend' (BAb-78); not in RUa; Ch. *aneel'an* 'older brother' (MO-148); in a note in BOg-183, Menovshchikov states that this is an uncommon CSY word. Not in VDa.

itenwaati- (RUa-179), **itenvate-** (VDa-58) 'person living with someone else's family, lodger, tenant'; not in BAb; Ch. *et'ənwatəl'an* (MO-158); analysis in VDa-58.

ivisa- 'flounder; halibut' (BAb-84; RUa-135); Ch. *ewec*, pl. *ewecət* 'white fish' (MO-152). Not in VDa.

kagerghu- 'hard crust on snow'; Ch. *kewir'əl*, pl. *kewir'əlti* 'dry snow that is frozen through' (MO-59). Not in VDa.

kalile- 'Dalmatian dog'; not in RUa; Ch. *kelil'an* 'variegated; variegated seal; variegated reindeer' (MO-60). Not in VDa.

kamagragh- 'to butt' (BAb-88; RUa-196), elephant (BAb-88)'; Ch. *kamagrak* 'to move, to wallow; to kick; to tear oneself away' (MO-51). Not in VDa.

kamagrite- 'mammoth, mammoth tusk' (RUa-196); not in MO; Ch. *kamagrətən* (VDa-58), *kamāgrētən* 'mammoth tooth' (NOR-215); also in Kor. This word must be related to the preceding one, but it is unclear how; VDa-58 states that it is a compound of *kamak* 'earth beetle' (not in MO) and *rətən* 'horn' (MO-118, 23). Both BOd-130 and NOR-215 have *kamāk* 'supernatural spirit; gnome' (not in MO), of which the earth beetle can apparently be a personification; probably mammoth tusks (or other mammoth remains?) were considered to belong to supernatural beings living under the earth. Fossil mammoth tusks and molars have been found in archeological sites on SLI (MUO-345). The Chukchi might have known about mammoths preserved in the permafrost and might have transmitted this knowledge to the Eskimos of the SFE.

Karake- 'Koryak (BAb-91; RUa-203), American Indian (BAb-91)'; the SLI meaning arose from the fact that American Indians are the second group found on the mainland to the east, past the Inupiaqs, just as the Koryaks are the second group found on the mainland to the west, past the Chukchi (BAb-91). Related to Ch. *karākwarat* 'Kerek (pl.)' (VDb-163); not in MO. The etymology of this word is not clear. According to KL-317 and JAK-605, from *qorak* 'raiser of the

reindeer', related to Ch. *qoraŋə*. However, this cannot be correct, since this word has an initial /q/ instead of a /k/ and since there is no variation of /k/ and /q/ within Chukotan. *Koryak* and *Kerek* are apparently from this same word. Not in VDa.

karge- 'hole in garment'; Ch. *kargəlgən*, *kargən*, pl. *kargət* 'hole; patch in garment' (MO-52). Not in VDa.

kaynge- 'brown bear'; Ch. and Alutor (Palanski dialect) *keyŋən* (MO-60, ZHa-203); Kor. (Chavchuvenski and Kamenski dialects) *kayŋən* (ZHc-203; BOe-692). VDa-58.

kenmaangqagh- 'water behind the shoreline caused by high waves flooding the area; lagoon'; Ch. *kənmaŋqə*, pl. *kənmaŋqat* (MO-56); also in Kor.; analysis in VDa-58.

kentate- 'to be successful'; not in BAb; Ch. *kəntetək* 'to be successful', *kəntəgərgən* 'success' (MO-56); analysis in VDa-58.

kewaaye- (RUa-238), **kewaayi-** (WA-37) 'bit of tasty food'; not in BAb; Ch. *kəwey*, pl. *kəwegti* 'present, treat' (MO-55). Not in VDa.

kimaawi- 'to delay; to stall; to waste time'; Ch. *kemawek* 'to prevent, hinder' (VDa-69; not in MO), *kimewqew* 'cause of delay' (MO-52), *kemakwərgən* 'hindrance, obstacle' (MO-60).

kuynge- 'pipe'; Ch. *koyŋən* (MO-53); Alutor *kuyŋən*; also in Kor. VDa-42, 58.

lalala- 'dew on the grass'; Ch. *lelel*, pl. *leleltə* (MO-73); Alutor *lalal* (VDa-42, 59).

Laluramke-. Laluramka- 'White person (BAb-105), Russian (RUa-303)'; literally "bearded clan"; a compound of Ch. *lelut* (singulative *laləlgən*) 'mustache, beard' (MO-73), and *remkən*, q.v. under *ramke-*; analysis also in VDa-58.

Masingka- 'SLI, Siberian Yupik or Naukanski Yupik Eskimo person (BAb-113)'; in CSY of the SFE, this base is a particle only according to RUa-320, but the fact that she also gives a derived verb *Masingkati-* 'to speak Eskimo' (RUa-320) is

evidence that the noun with the SLI meaning must also exist, but it is perhaps uncommon. Its origin is Ch. *mecānkə* 'enough; good' (MO-82), a particle which will be discussed in subsection 6.3.1. It is apparently derived from the Chukchi particle when used as a term of politeness. In the early travel and ethnographic accounts, it is documented as a term of salutation the Chukchi used to address foreigners, Eskimo as well as to English speakers (NO-387). The borrowing of this term into CSY might have arisen because of the superior socioeconomic position of the Chukchi (see chapter 5, section 5.1), prompting the Eskimos to imitate the Chukchi politeness pattern. However, some CSY speakers took it to refer to themselves only, and used it as such (HU-277). According to the oldest speakers from SLI, it is therefore a legitimate synonym of CSY *Yupik* 'good, honest person' (TOO-pc; WON-pc). It is also believed by some older speakers to refer to whites and not to Eskimos, a predictable confusion since the Chukchi also addressed whites by it. MOO-355 refers to "Mazinka" (*Masingka*) bread, which he describes as bread fried in seal oil, a recipe which must have been imported by whites. Since at present *Masingka*- is not generally used, younger speakers are often not sure of its exact meaning (Gordon Irrigoo, personal communication). Not in VDa.

mataawi- 'to have a hard time'; Ch. *metewək* 'to despair; not to be able to' (MO-82). Not in VDa.

Meregtemiit 'people from *Meregta*, clan name'; not in BAb, RUa, or VDa; discussed in chapter 5, subsection 5.2.1.

mesuuna- 'comb; hairbrush; to comb; to brush hair'; Ch. *məcuner*, pl. *məcunerjet* (MO-81). VDa-45 mistakenly takes this to be an Eskimo word borrowed into Chukchi.

mugu- 'to go away into the far distance' (BAb-119), 'caravan of nomads, of reindeer' (RUa-329); Ch. *mgo'an* 'caravan' (MO-77, 78), *mgutəlek* 'to go as a caravan' (VDa-55, 59).

naayghagh- 'mountain'; Ch. *ɲegnə*, pl. *ɲegti*; some derivations of this word show the /y/, such as *ɲaygətolgən*, *ɲaygətoɕgən* 'slope of mountain' (MO-91, 95); BOe-688 has *ñaiñai* 'mountain'; also in Kor. VDa-59.

nemetw̄a- 'to stay home; to stay in one place'; Ch. *nəmətwak* 'to live; to reside' (MO-87; BOe-759); analysis in VDa-59. This form is thus not related to CSY *ne-* 'home; place' (BAB-120).

ngilvil (VDa-59); not in BAB; not in RUa; **ngayagwell** (RUa-397); not in BAB 'herd, flock'; Ch. *ŋelwəl*, pl. *ŋelwəl'ət* (MO-95); also in Kor.

paarghu- 'appendix (anatomical)' (BAB-149; RUa-406); has the same stem as Ch. *per'uten* 'raincoat of thick walrus gut' (MO-105). Not in VDa.

pawiile- (RUa-408), **pavela-** (VDa-59; and <e> is [e], not [ə]); not in BAB; 'butt of gun'; Ch. *pawelgən*, pl. *pewit* 'thigh, hip; butt of gun' (MO-97).

payaaqe- 'calf of leg; woman's fancy knee-high bleached sealskin boot; to put on or wear such boots'; Ch. *paaqalgən*, pl. *paaqat* 'calf of leg' (MO-97). In VDa-45, said to be an Eskimo loan into Chukchi, but in VDa-59, said to be a Chukchi loan into Eskimo.

perara- 'dish of finely minced meat cooked in meat broth and then jelled before eating'; Ch. *pererem*, pl. *pereremət* (MO-100, 101); also described in BOe-660 as 'meat pudding', RU-65, SV-64, 65, 115, 138, and OO-8. VDa-55, 59.

perutku- 'snuffbox'; Ch. *protkoocgən* (MO-100); also in Kor.; VDa-59.

petqa- 'quite another one; different' (BO-71); not in BAB; not in RUa; Ch. *pitka* 'matched' (BO-71); apparently the stem of Ch. *pəṭqək* 'to repeat'; *pəṭqələm* 'especially; still more' (MO-103). Not in VDa.

pikemla- 'threshold of house' (RUa-411; RU-411); not in BAB; Ch. *piqiməl*, pl. *piqiməlti* 'rapids on a river; shoal' (MO-99). Not in VDa.

pitiya- 'boiled reindeer gut' (VDa-59); not in BAB; not in RUa; Ch. *pitiyi* (VDa-59), not in MO, but maybe related to Ch. *pittək* 'to press out, squeeze out' (MO-100).

qalmaawi- 'to be unable, unsuccessful in catching something in hunting' (WA-82); not in BAB; not in RUa; Ch. *qelmətək* 'to be unlucky at hunting' (MO-70). Not in VDa.

Qaaramka- 'a clan originally from Avan in SFE' (BAB-176), 'Even' (RUa-258); Ch. *Qaaramkən* 'Even; Evenki' (MO-62). The preceding are names of two groups of speakers of Northern Tungusic languages (CO-58). Since Tungusic groups are not in direct contact with Eskimo settlements (BOc-446), the identification with the Eskimo village of Avan must be incorrect. Apparently, the Chukchi must have considered the Even and Evenki to be reindeer herders "par excellence," since the name is a compound of *qaa-*, an unsuffixed variant of *qoraŋə*, cf. under *qerenga-* and *ramkən* under *ramke-*. Not in VDa.

qayaawagh- 'hoarfrost, rime'; Alutor and Chavchuvenski Koryak *aqayawka*, from *qayaw-* 'cold, freezing' (VDa-58); not in MO.

qerenga- 'large old reindeer (in folktales)'; Ch. *qoraŋə*, pl. *qaat* 'reindeer' (MO-65). Not in VDa.

qergu- (RUa-294), **qurgu-** (VDa-58) 'dwarf Siberian cedar pine'; not in BAB; Ch. *qərgoqər*, pl. *qərgot* (MO-68).

qirgese- (BAB-189; RUa-272; MV-49), **qergese-** (BAB-183) 'window'; Ch. *qərgəcən* 'opening for letting light in; window' (MO-71); analysis in VDa-58.

qirpaawi- 'to be eager; to be enthusiastic'. As other verbs ending in *...aawi-*, certainly from Chukchi, but the Chukchi form has not yet been found; not in MO. Not in VDa.

qitaaqe- 'fish of some sort, perhaps silver salmon (?)' (BAB-189), 'Siberian salmon (Russian *kéta*)' (RUa-273), 'dog salmon (*Oncorhynchus keta*)' (JO-73; RU-504); Ch. *qetaqet*, pl. *qetat* (MO-71); Alutor *qitaqit*; also in Kor. VDa-41, 58.

qughsatku- 'large polar bear'; described as being furless around the ankles, having a solid rib cage and breast bone making it almost impossible to spear except in one spot on the front of the neck; called "king polar bear" in local English (BAB-191). Ch. *q'ocatko* 'polar bear-shouter'; 'monster', related to *q'ocatkok* 'to shout; to call; to shout "hi"' (MO-67), but it is not clear to me how this type of bear is semantically connected with shouting; 'giant polar bear, with huge paws, and a body of solid ivory (mythical being in Chukchi folklore)' (BOa-579, 587).

quunpekaghtagh- 'something from the far distant past, something that has existed forever'; from a Chukchi particle, see subsection 6.3.1. Not in VDa.

ququngagh- 'leaf; edible low-bush willow leaf'; Ch. *qoqorǵaŋ* (BOe-855, Northeastern dialect, VDa-45), NOR-223 has *kokoŋadlin* 'Salix sp.'; not in MO. According to VDa-45, this is a loanword from Eskimo into Chukchi.

quyngigh- 'reindeer'; Ch. *qoraŋ*, pl. *qaat* 'reindeer' (MO-65); see above (p. 334) for other Chukotko-Kamchatkan cognates and for a discussion why this is not necessarily a loan from Koryak, rather than from Chukchi. VDa-58. This word has a wider diffusion than any other Chukchi word in the Western Arctic. It is one of the three Chukchi loans existing in CAY (JAb-688) and is also, ignoring Imakliksi Inupiaq, the only Inupiaq word of Chukchi origin. Some forms are Nauk. *quyngiq* (MEe-436), CAY *qusngiq*, *quyngiq* (JAb-341, 342, 344), Imakliksi (Big Diomede) *qunniq* (MEg-40), and Alaskan Inupiaq *qunniq* (MC-52). In the Yupik words, it appears that a form with /y/ has spread.⁵ In the Inupiaq cases, it is not clear whether the clusters /nn/ and /ny/ are from an earlier /ny/ or from an earlier /ŋy/.

ramke- 'clan; ethnic group'; Ch. *remkən*, pl. *remkət* 'people' (KR-51; VDa-59; BOe-691); MO has this form in compounds only and in derived forms like *remkəŋən* 'guest, visitor' (MO-125); Alutor *ramkən* (VDa-42); also in Kor.; analysis in VDa-59. See also *Aymaramket*, *Armaramket*, *Laluramke-*, *Qaaramke-*.

ranme- 'inside wall of the winter house' (WA-99), generally in the plural. Not in BAb; not in RUa; Ch. *renmən* 'wall' (MO-125). Not in VDa.

ranmegu- 'ground floor of the winter house' (RUa-435); not in BAb. See the preceding entry. Not in VDa.

ratame- 'winter canvas roof of Ch. house (*yaraŋ*)' (RUa-436); not in BAb; Ch. *retem*, pl. *retemət* (MO-126). Not in VDa.

⁵ CAY <s> represents /z/, which frequently alternates with /y/.

- ratamiiragh-** 'parka of caribou skin'; Ch. *retemir'an* 'summer coat of reindeer skin' (MO-126); a compound of *retem*, cf. under *ratamet*, and *ir'an* '(over)coat' (MO-44); also in Kor.; analysis in RU-121 and VDa-54, 59.
- ratamyaag-** 'knee-high summer boot of waterproof sealskin with hair in; to put on this type of boot'; Ch. *retemyegat* (MO-40, 126); analysis in VDa-54, 59.
- rawelinge-** 'squirrel' (RUa-436); not in BAb; Ch. *rawal'en*, pl. *rawal'enjat* (MO-106); also in Kor. VDa-59.
- repa-** 'hammer; to hit with a hammer'; Ch. *rapenja*, pl. *rapet* 'stone hammer; hammer' (MO-120); Alutor *tpanja* (VDa-42); also in Kor. VDa-59.
- retwha-** 'to bombard with artillery', **retwha-**, **retwhate-** 'gun, cannon'; Ch. *retwatək* 'to shower, bespatter with' (MO-122), *retwatər* 'gun, cannon' (VDa-59); analysis in VDa-59.
- riirngi-** 'to watch stealthily; to observe; to spy on'; Ch. *riirngək* 'to question; to inspect, to investigate' (MO-112). Not in VDa.
- risinugate-** 'buckle of belt' (VDa-59); not in BAb; not in RUa; Ch. *ricitinej* (VDa-59); also in Kor.; analysis in VDa-59; cf. Ch. *ricit*, pl. *ricitti* 'belt' (MO-59).
- Rultangigh-** (vowel length uncertain) 'Orion (constellation)'; not in BAb; not in RUa; Ch. *Rulte'nñin* '[man with] crooked [back]' (BO-87); 'the Belt of Orion is considered the crooked back of the archer Rulte'nñin' (BOd-105); from Ch. *rultantetək* 'to become crooked' (MO-110); also in Kor. Not in VDa.
- semnga-** 'castrated (of reindeer)' (RUa-459); 'male domestic reindeer' (BOg-183); not in BAb; Ch. *cəmŋə*, pl. *cəmŋat* 'old stag' (MO-146), 'reindeer buck; Capella (constellation)' (BOd-106). Not in VDa.
- semqatwhala-** (RUa-459; VDa-59), **semqatwhale-** (BAb-210) 'pocket knife' (always dual ?); Ch. *cəmŋatwal*, pl. *cəmŋatwalat* (BOg-203; MO-146; KR-140), a compound of *cəmŋet* 'strap, bundle, bunch' (MO-146) and *walə* 'knife' (MO-19); analysis in VDa-59.

silimuqa- 'to poison' (RUa-445), 'to sting, bite (of insects)' (VDa-60); not in BAb; Ch. *cilimuq*, pl. *cilimuqet* 'poison', *cilimuqetək* 'to poison with strychnine' (MO-144); also in Kor.; analysis in VDa-60. According to MU-228, in SLI this is a noun meaning 'mushroom' in general and the fresh *Amanita muscaria* in particular; the dried *Amanita muscaria* is called *wapaaqa* (q.v.).

siilu- 'brass' (BAb-219), 'red copper' (RUa-445); Ch. *cetlocel*, pl. *cetlot* 'copper' (MO-143); also in Kor. (BOd-106). Not in VDa.

sisaawi- 'to guess, to sense; to surmise'; Ch. *cicewək* (MO-146); VDa-59.

suugernge- 'curtain of caribou or reindeer hide in an old-style house partitioning off the sleeping area'; Ch. *cowərgən* (VDa-59); not in MO; also in Kor.; VDa-55.

tange- 'raider'; Ch. *tangətan*, pl. *tangət* 'stranger; Koryak; European' (MO-128), the Chukchi use this term for the Reindeer Koryak, the Chuvantzy (a Russianized group of Yukagir origin living on the Anadyr River), and the Russians, whereas the Koryak use it for the Reindeer Chukchi, the Chuvantzy, and the Russians (BOa-581-82; JO-318). According to RU-237, this word probably comes from Koryak. It is not clear why this assumption is made, since the word also exists in Chukchi.

tawale- 'dried fish (Russian *júkola*)'; not in BAb; Ch. *tew'el*, pl. *tew'elti* (MO-136); Alutor *taw'al*; also in Kor.; VDa-42, 59.

teghla- 'owl'; Ch. *təqəl*, pl. *təqəlti* (MO-133); note fricative *gh* from *q* before *l*, probably an Avatmii SFE dialect feature (RUa-5). In VDa-45, this is erroneously believed to be an Eskimo loanword into Chukchi.

telaananga- 'sail; to sail'; Ch. *təlanəq*, pl. *təlanəqat* 'means of travel or conveyance' (MO-134), *təlenəq* 'sail' (VDa-60); analysis in VDa-60.

telenwinanga- 'saw' (RU-132; RUa-514); not in BAb; Ch. *tənəlwenəq*, pl. *tənəlwenəqat* (MO-135); the Chukchi form *tənəlwinəqat* given in RU-132 must be either inaccurate or from another dialect, since it violates vowel harmony; analysis in VDa-60.

temke- 'hummock; tussock'; Ch. *təmkəlgən*, *təmkətəm*, pl. *təmkət* (MO-134); also *təmkən* according to KR-40; also in Kor. VDa-60.

temngitwha- 'to act wastefully; to spread lies; to waste time'; Ch. *təmjetwak* 'to be without occupation, to idle' (MO-134). Not in VDa. See also the related particle *temngi* in subsection 6.3.1.

Tenagergen (vowel length uncertain) 'one of the names of the divinity of the upper world who watches over the adherence to the old customs', a synonym of *kiyaghnegh-* (MEd-448); not in BAb; not in RUa; probably Ch. *təgəgərgən* 'dawn, daybreak; growth, growing' (MO-135; BOe-856). Not in VDa.

tenpe- 'to pierce, spit, stick into, drive into' (RUa-516); not in BAb; Ch. *tənpək* (MO-135); analysis in VDa-60.

tenuupa- 'silver fox'; Ch. *tinu'p* 'blue fox' (BOe-687); not in MO. Not in VDa.

tilma- 'eagle, sea-eagle, kite' (VDa-60); not in BAb; not in RUa; Ch. *tilmetil* (MO-130), *təlmətəl* (VDa-60); also in Kor.

tinmaawi- (VDa-60; RUa-500), **tenmaawi-** (BAb-229; RUa-516) 'to be accustomed to something' (BAb-22), 'to accommodate, to adapt, to adjust' (RUa-500, 516); Ch. *tenmawək* (MO-137, 38); also in Kor.; analysis in VDa-60.

tiiwri- (BAb-231, RUa-500), **tiiwrite-** (BAb-231) 'main pole in a traditional house (?)'; Ch. *tewər*, pl. *tewrit* 'one of the three principal poles of a *yaraŋə*' (MO-136). Not in VDa.

tuykok 'pike' spelling according to BOg-183, the only source giving this as a CSY word; not in BAb and RUa; Ch. *tuyketuy*, pl. *tuyket* (MO-132). Not in VDa.

utkuse- (BAb-252, RUa-555), **unkuse-** (BAb-248) 'steel trap for animals'; Sir. *utkucʔa* 'trap' (MEb-201); the Sir. form shows that the Chukchi glottal stop is prevocalic; Ch. *utkucʔən* (MO-141); analysis in VDa-55, 60.

walamnaag- 'file; rasp'; Ch. *walamnak* 'to sharpen, whet a knife' (RU-132); Ch. *walamnakwən* 'file', a compound of *walə* 'knife' (MO-19), and *pnakwən* 'whetstone' (not in MO), the analysis of VDa-58. This compound is not in MO.

walguyaag- (BAb-257, RUa-562), **walveyaagh-** (RU-538) 'snowshoe'; Ch. *welwəyegət* (VDa-42, 44, MV-49); not in MO; Alutor *valvətiguwvi* (VDa-42); also in Kor. VDa-44 mistakenly believes this to be an Eskimo loanword into Chukchi.

wamelqa- 'anterior arched bow of a sled'; Ch. *waməlkəgən*, pl. *weməlkət* (MO-19; VDa-58), but *wamelqəgən* in VDa-55; also in Kor.

wamen'gu- 'toad' (BAb-257), 'frog; toad' (RUa-536); Ch. *waaməngən* (MO-18); Koryak *waməngən* (ZH) 'newt' (Russian *tritón*, erroneously translated as English "triton" in the Russian-English dictionaries); JO-214 mentions Koryak *Waməngən* 'Triton' (a mythological being), but of course his gloss should be interpreted as a calque from Russian rather than implying a similarity to the Tritons of classical mythology. It is not certain that CSY speakers have firsthand experience with amphibians, and therefore the Eskimo translations 'frog, toad' might be inaccurate; certainly amphibians have not been recorded from SLI. The translation given for the Chukchi and Koryak terms might be more accurate and apparently refers to the Siberian Salamander (*Hynobius keyserlingi*), which does occur in the Chukchi area and even north of the polar circle, but is not on record for Alaska (HO-21, 57). SV-54-55 gives a description of this animal and the beliefs associated with it by the Chukchi, showing that it is relatively well known to them. Sverdrup states that the term literally means 'river-hand', thus assuming that it is a compound of *weem* 'river' (MO-29) and *məngəlgən*, pl. *məngət* 'hand, arm' (MO-80). I doubt that this is correct. Not in VDa.

wani- 'bell'; Ch. *wəniwən*, pl. *wənīt* (MO-27). (VDa-58).

wapaaqa- 'marijuana (SLI); fly-agaric (SFE)'; Ch. *wapaq*, pl. *wapaqat* 'fly-agaric' (MO-20); also in Kor. and Alutor; VDa-58. The gloss 'fly-agaric' (the toadstool *Amanita muscaria* or *Agaricus muscarius*) is certainly the oldest one; it was dried and eaten as a hallucinogen.

waari- 'wigwam-shaped skin tent' (BAb-258), 'tripodlike structure to which is attached the roof pole of the summer tent; tripod, trivet for cooking over a campfire' (VDa-58; RUa-565); from Ch. *w'arevar*, pl. *w'aret* 'fork, bifurcation; fork-shaped stick; branch of river' (MO-23), according to VDa-58, but maybe connected to Ch. *warelgən*, pl. *waret* 'lower pole in a tent, one of three poles forming a tripod' (MO-20).

- watape-** 'moss, reindeer moss' (VDa-55, 58); not in BAb; not in RUa; Ch. *watap*, pl. *watapət* (MO-20; BOe-677); also in Kor.
- waaype-** 'net shuttle': not in RUa; Ch. *waypəway*, pl. *waypət* (MO-19). Not in VDa.
- welqa-** (BAb-258), **welqe-** (RUa-567) 'ash; slag; dross'; Ch. *wəlqəwəl*, pl. *wəlqət* (MO-24), *wəlqawəl* (VDa-58) 'coal'; also in Kor.
- wesqaawi-** (BAb-259; RUa-567), **wisqaawi-** (RUa-567) 'to feel defeated; to feel incapable; to lack confidence'; Ch. *wəsqewək* 'to be disappointed' (MO-25). Not in VDa.
- wiirqa-** 'ice depressions and bumps in snow'; Ch. *werqawer*, pl. *werqat* 'snow buildup; stones sticking out' (MO-28). VDa-44.
- yagarina-** (RUa-587), **yagaarina-** (WA-136) 'stick used for braking on a dogsled; to brake with this device'; not in BAb; possibly **yagharina-** attested once (VDa-47), is more accurate, since one would then have the Ch. /r/ - CSY /k/ correspondence described in section 6.1. Ch. *ya'arenaŋ*, pl. *ya'arenaŋat*, dialectal variant *yaw'arenaŋ* (MO-162; VDa-55); *y'arenaŋ* (VDa-47); analysis in VDa-60.
- yaghrantate-** 'to increase; to love more, to pay more attention to, excessively' (RUa-588) not in BAb; from the Chukchi particle *y'arat*, *ya'rat*, discussed under *yeghrat* in subsection 6.3.1. Not in VDa.
- yanutqu-** 'to interrupt in conversation' (WA-137); not in BAb; not in RUa; Ch. *yanotq'ok* (MO-162). Not in VDa.
- yataaghqe-** 'to prepare; to get ready'; from the Chukchi particle *yet'arŋ*, discussed under *yataang* in subsection 6.3.1. Not in VDa.
- yaawaati-** 'large sled pulled by reindeer'; Alutor *uyatik* (VDa-55, 60); not in MO.
- yaywaale-** (RUa-588; RU-98, 450; VDa-60), **yaywaali-** 'orphan' (BAb-262); Ch. *yeywel*, pl. *yeywelti* (MO-37, 162); also in Kor.; analysis in VDa-60.

yaywaase- 'one who has safely escaped danger', and with the NV postbase *-(ng)u-* 'to be N'; *yaywaasengu-* 'to accomplish or conclude successfully, safely' (RUa-588); probably related to Ch. *yeywecetək* 'to feel compassion, to pity' (MO-37), *yei'veču* 'compassion' (BOe-765). See also the Ch. particle *yaywacetə*, given under *yaywaaseng* in subsection 6.3.1. Not in VDa.

yelaarge- 'grey fox' (RUa-187; EM-91), **yelaarqa-** 'blue fox' (BAb-262); Ch. *yel'argən* (MO-37), *gêla'rgin* 'gray fox' (BOe-691); Koryak (Chavchuvenski dialect) *yəlg'atgən* (ZH). Not in VDa.

yuwayu- (RUa-548), **yugayu-** 'common loon'; Ch. *yokwayo*, pl. *yokwat* (MO-38); Alutor *yuwwayuw* (VDa-42, 45); Koryak *yovayow* (ZH). VDa-45 erroneously states that this is an Eskimo loanword into Chukotan.

The following Russian words were probably borrowed into CSY via Chukchi:

čay 'Russian brick tea'; not in BAb; not in RUa; Ch. *cay* (MO-142) and Russian *čaj*. This unassimilated loanword might be directly from Russian and according to MOO-356 was apparently used in Gambell (SLI) to refer to that particular type of tea. It is certainly not used at present on SLI.

egglipagh- 'Russian sourdough bread' (BAb-54); RUa-571 has the unassimilated loan *gळेbe-* only. Ch. *qlevan, qlep* 'bread' (IN-77); not in MO; Russian *хлеб*; see also *kayipa-* below.

kayipa- 'store-bought bread' (BAb-93-94), 'flat cake, doughnut' (RUa-191); Ch. *qlevan, qlep* 'bread' (IN-77); not in MO; Russian *хлеб*; cf. CAY *kelipaq* 'bread' (JAb-197).

kir'pisa- 'Russian brick tea'; not in MO; Koryak *kirpic, kerpec* (ZH); Russian *кирпич* 'brick'; also described in BOe-450; Sireniki has a more assimilated form *kirawica* 'snuff-box' (MEb-185).

kuuni- 'horse'; Ch. *konekon*, pl. *konet* (MO-53); Koryak *ko'n'e* (BOe-889); Russian *кón'*.

kurugagh- (BAb-103), **kuruwagh-** (RUa-225) 'pig'; Ch. koro'walhin 'cow' (BOd-131); not in MO; Koryak korow 'cow' (ZH); Russian koróva 'cow'.

saqaare- 'granulated sugar'; Ch. caqar, pl. caqartə (MO-142); Koryak caqar (ZH); Russian sáxar; also in BOe-889, and NOR-22.

sughma- 'chess; checkers; to play chess or checkers'; not in MO. Note the dialectal /ɤ/ in front of a continuant, not found in Koryak; coqmaw 'chess piece', coqmatkogəyən 'game of chess' (ZH); Russian šáxmaty. This is widespread loan, as shown by Sir. sughma (MEb-196), Nauk. sughmat (MEe-475), and Imakl. suǵmat (MEg-300).

tawaqa- 'tobacco'; Ch. taaq, pl. taaqat (MO-127); Koryak tavaq (ZH), ta'wax (BOe-889); Russian tabák.

For the sake of completeness, the following is a list of words considered by Vdovin (1961:58-60) to be Chukchi loanwords in CSY. However, the resemblances, either phonological, semantic, or both, are so slight that I am confident in considering them due to chance. The CSY form is given first, followed by the Chukchi word, and full references are not given. CSY *akivigte-* 'to prop up a skin boat on its side, to spend the night under a boat'; Ch. and Alutor *kiwək* 'to sleep in open air'; considered to be a loan in the other direction in VDa-40; CSY *awalig-* 'the one on the other side'; Ch. *yaal'an*; CSY *ikutkagh-* 'taken away at sea'; Ch. *yəkuntetək*; CSY *pugime-* 'to swim', *puglegh-* 'to rise to the surface (of water)'; Ch. *pəgatək*; CSY *qilleghnegh-* 'knot'; Ch. *kəltən* 'sheaf, bunch, ligament', also in Kor.; CSY *tenge-* 'to take off in flight'; Ch. *rinek, təjek* 'to fly', also in Kor.; CSY *tuute-* 'to step on'; Ch. *təttetək*, also in Kor.; CSY *umu-* 'to be thick'; Ch. *n'umkin*; CSY *umuqagh-* 'thick thing'; Ch. *omgərgən*; CSY *vegaagh-* 'grass; single blade of grass'; Ch. *wi'ey* 'grass', also in Kor.

6.3. List and Index of Particle Loanwords

Subsection 6.3.1 is a reference list of all CSY particles borrowed from Chukotan, with cognates in the other three Soviet Eskimo languages (Sireniksi, Naukanski, and Imakliksi), Chukchi etymologies for each, some syntactic remarks, and extensive references to the significant Eskimo and Chukchi works on the topic.

On SLI, the commonly used particles, such as *eIngaatall*, *enkaam*, or *iwernga* are presently considered by all to be genuine Eskimo. Only my oldest consultants

(see, for example, TOO-pc and WON-pc in the list) were aware of the Chukchi origin of some of the rarer particles, and comment that such words are typically Siberian and not often used anymore. Speakers in their fifties and sixties also say that many particles are not used anymore, but they are not aware, however, of a Chukchi origin (see GOL-pc in the list). Younger speakers (in their thirties) are not aware of the origin of the rarer particles either and often are not even aware of their existence in the language of older CSY speakers (see WAGa-pc in the list). In general, Chukchi particles tend to be less numerous in the speech of those born after the time relationships with the Chukchi ceased. This significance of this tendency is discussed in sections 6.5. and 6.6.

In this list, the conventions for citing CSY and Chukchi forms and glosses are the same as the ones given in subsection 6.2.1 for the list of nonparticles in subsection 6.2.1.1. The glosses, however, are mainly from my field notes and thus do not always agree with Badten et al. (1987). Again, when references to BAb and RUa (Rubtsova 1971) are not given, one can assume that the CSY particle is given in identical form in both these dictionaries.

In addition, I have given fuller references for relatively rare particles and systematic references to the already existing lists of CSY particles. These are Vdovin (1961:61-62), abbreviated as VDa, Menovshchikov's major grammar (1967:203-68), abbreviated as MEc, and Menovshchikov's (1986:64-66) latest list, abbreviated as MEi.

CSY particles recorded for the SFE only, and therefore never heard during my fieldwork, and CSY particles unanimously considered by my SLI informants to be used in the SFE only are followed by "SFE". It has been added for the sake of clarity, since this information can also be inferred from the references. This indication is not used for SFE forms of general CSY particles and for particles considered to be typically Siberian by only a few of my SLI informants. It is not repeated after each form of the same particle or after each derived particle.

Since the particle list is more relevant than the nonparticle list to the main topics of this study, the corresponding forms in Sireniskski, Naukanski, and Imaklikski have also been given if they were found in the literature. The page numbers in parentheses after the forms from these other Eskimo languages refer for Sireniskski to Menovshchikov (1964), for Naukanski to Menovshchikov (1975), and for Imaklikski to Menovshchikov (1980), unless otherwise noted.

For additional clarity, the Chukchi etymologies always begin on a new line under the particle they refer to.

Forms of particular particles with presumably Chukchi morphology which have been borrowed as such from Chukchi and particles with CSY derivational or

compositional elements are given under the underived entry. In CSY these are idiomatic (nonproductive) combinations, and are followed by the abbreviation "id."

The elements that are Chukchi stems or suffixes occurring in CSY particles include *-ill*, *-legi* (from Ch. *lăgi* 'of course, certainly, really, truly' ([Moll and Inénlikéj 1957:73; Bogoras 1922:863]), *-lemnga* or *-allameng* (from Ch. *lămja*, *lămje* 'still, again', or *alămja* 'is that so?; only think of it! (surprise)' ([Moll and Inénlikéj 1957; Bogoras 1922:854, 869, 888]), *-ngan* [from Ch. *ŋan* '(demonstrative particle, used with pronouns for a more precise definition of the direction pointed to)' (Skorik 1977:336, 338; Moll and Inénlikéj 1957:91)], *-si* and *-wan* (possibly related to *-ngan* [Bogoras 1922:879]). The meaning of the elements other than *-lemnga* or *-allameng*, *-legi*, and *-ngan* is not clear, and etymologies for these have not been found in the grammatical literature on Chukchi. Some particles are apparently lexicalized compounds of two particles; the second element of such compounds is *amen*, *iitek*, *iwleng*, or *lleqa* (q.v.). Examples of these are also provided in the list.

CSY particles also contain two lexicalized suffixes *-am* and *-kin*, which could be either Chukchi elements or frozen Eskimo enclitics.

-am might be from the Chukchi enclitic $\Rightarrow m$, an emphatic particle, indicating in a story that it is well known to the narrator and is supposed to be known to the hearer (not in Moll and Inénlikéj 1957; Bogoras 1922:849-50, 891; Comrie 1981:274). Chukotan cognates are Koryak *am* (Kamenski dialect), *im* (Parenski dialect) (Bogoras 1922:876). *-am* could also be cognate to the CSY enclitic $\Rightarrow am$ '(used for emphasis and contrast)' (Jacobson 1984:622). It appears that *-am* can be used with a few particles not of Chukchi origin, such as *maatenllaam* 'this time' (Badten et al. 1987:149), *sanganllaam* 'why now' (T/52-25) (from *maaten* 'now', or *sangan* 'why', $\Rightarrow llu$ 'and' and *-am*), *qayugham* 'how is it?, how did it go?' (from *qayuq* 'how' and *-am*) (NBK/5-56; Pungowiwi and Gologergen 1975:15, 16; Badten et al. 1987:249; Rubtsova 1971:263), and *walluumllu* 'or maybe' (probably from *wallu* 'or maybe', *-am*, and $\Rightarrow llu$) (Badten et al. 1987:257). However, it never occurs with nonparticles and therefore cannot be considered a productive CSY enclitic.

Possibly, the CSY element *-kin* is relatable to the CAY enclitic $\Rightarrow kin$ 'I wonder' (Jacobson 1984:622), but it occurs only with two Chukchi particles borrowed into CSY: *enankin* 'at least; oh my!' and *ketaatkin* 'if only; unfortunately'. Therefore, it is more likely to be an as yet undetermined element of Chukchi origin, but it is interesting to note that the semantics of these particles are not incompatible with the meaning of the CAY enclitic $\Rightarrow kin$. Some of the other presumably Chukchi elements also occur in particles not of Chukchi origin; the three examples occurring in my corpus are *tanemlleqa* 'and then again' (from *tanem* 'finally, once again', and

lleqa) (NBK/8-1; Pungowiwi and Golodgergen 1975:7; Apassingok et al. 1985:18, 21; Badten et al. 1987:309); *qayughllagngan* 'how?' (from *qayuq* 'how', *-ghllag-* 'big', and *-ngan*) (Bogoras [1901]:53); and *wallungan* 'maybe' (from *wallu* 'or', and *-ngan*) (Jacobson 1983:358).

The analysis of particles with originally CSY derivational morphology has already been provided in chapter 3, section 3.3.

Many particles can also be followed by CSY enclitics or combinations of enclitics (see chapter 4, section 4.3). All such combinations have been listed under the derived form, but no attempts at translation were made where no clear information was available. It appears that some of these combinations are idiomatic. Such cases of idiomatic formation are not always easy to distinguish from the ones that are not; the ones that are certainly idioms are followed by the abbreviation "id."

As argued by Wierzbicka (1986:519-33), particles are a part of language grammars that has often been neglected or little understood, and this is due to the complex and sometimes elusive semantic, pragmatic, and discourse functions of particles. This situation has recently changed, and precise descriptions of the semantics, pragmatics, and discourse function of particles are being made, such as Bartsch (1976) on German adverbials, Wierzbicka (1976) on Polish particles, and Schiffrrin (1987) on English discourse markers. Because I do not have the native-speaker intuitions almost prerequisite to such a type of analysis and because my knowledge of CSY is not advanced enough at this point, I have not been able to reach the level of detail found in these works. However, I trust that this list will be useful as a database and reference for future research and that a description and classification of the particles in terms of semantics, pragmatics, and discourse function will be facilitated by it. The most extensive discussion on the meaning of CSY adverbs and particles in the literature is Menovshchikov (1967:203-68); it is, however, rather repetitive and impressionistic, and presupposes a knowledge of the pragmatics and semantics of Russian particles that I do not possess.

Nevertheless, I have attempted to classify the CSY particles and adverbs syntactically. There is often a lot of variability for the common particles and not enough information on the less common particles, and as a result the classification is very rudimentary. Whenever enough information on the syntax of a particular particle was available, a statement on syntactic information is given at the end of the entry, after the information on Chukchi etymology. The abbreviations used in this statement are tentative and probably insufficient for an accurate syntactic classification. For word class, I distinguish:

ADV	Adverb
CONJ	Conjunction
INJ	Interjection

The position of particles with respect to the elements they modify is not relevant for interjections, since they do not modify a clause, and for conjunctions, since they stand between the conjoined elements. The abbreviations for position follow the ADV particle subclass indication and are separated from it by a hyphen.

CFR	Free: either clause-initial or clause-final
CLF	Clause-final
CLI	Clause-initial
VF	Verb-final
VFR	Free: either verb-initial or verb-final
VI	Verb-initial

Sequences of particles modifying one another are numerous and might be quite long; sequences of three or four are not uncommon. The semantics of these sequences is even more difficult to describe than that of individual particles; idiomatic syntactic combinations of particles also exist, and many are given in Rubtsova (1971). A list of the possible sequences of particles or idioms are not given since I have not devised a framework for distinguishing the idiomatic ones from the nonidiomatic ones.

6.3.1. List of Particle Loanwords from Chukchi

agnepa (BAb-19; SI-11; RUa-25; WA; MEc-219, 270; MEi-64); pronounced both as *agnepa* and *awnepa* (where the *w* stands for the strongly labialized velar fricative, phonetically corresponding better to the Chukchi form) by one consultant from Savoonga (GOL-pc); Sir. *agnepa* (101, 177); Nauk. *awgnəpa* (310-12; MEi-64), *agnəpa* (MEi-64); Imakl. *awgnəwa* (170, 174-75), *awgnəpa* (171), 'probably; maybe; must have'; implies that the statement is inferred from circumstances; *entaqun* (see under *enta*) is different in that it points to the speaker's belief or thought.

Ch. *ewnəpe* (MEc-270; MEi-64), *ewnəp* (MEc-219, MEg-170, 174) (not in MO); Koryak *awnəp* 'besides, moreover' (ZHa-297; BOe-876). ADV-CLI.

Imakl. *awʔnəwlaka* (174).

ahaa (BAb-20), **ahaam** (BAb-20; SI-54; RUa-21), **haam** (BAb-66; SI-54; SLe-30; o) 'enough!; that's enough; all right; so be it'. The variety *ahaa* does not seem to be common, and is attested in BAb-20 only. Probably from Chukchi, but no evidence has been found yet. INJ.

ahaamangam (BAb-20; SI-3; SLe-15, 17), *haamangam* (BAb-66; SI-54) 'enough!; that's enough; all right; so be it'.

ahaamngam 'enough!; that's enough' (RUa-21).

haamangamngam 'enough!; that's enough; all right; so be it' (BAb-66).

alaghrang 'besides; furthermore; also; "might as well", all right!'; used because of the continuing insistence of the interlocutor on something or the continued existence of certain circumstances (BAb-25; RUa-61; WA; MEc-207, 271; not in MEi).

Ch. *ar'ala* 'perfectly, at all; very' (MO-14). ADV-CLI.

alemeng (WA-7); Nauk. *aləməŋ* (319, 393) 'even if; even'.

Ch. *a'ləmə, a'ləməŋ* [ʔaləməŋ] 'you see; in spite of, although; anyway' (MO-12; BOe-854; SKc-361; ZHc-126); Alutor (Palanski dialect) *aləm* 'although; in spite of' (ZHc-125-26).

allameng 'more, some more, again' (BAb-28; not in RUa; not in MEi).

It is clear that CSY *allameng* is presently interpreted as the MD case of CSY *alla* 'other thing; different thing'; however, I believe it is likely that the meaning of the particle was influenced by the Chukchi particle *ləmpe* 'still' (MO-74; SKc-359), *lū'mña* 'again' or *alū'mña* 'is that so?; only think of it! (surprise)' (BOe-854, 869, 888). Further evidence is provided by the fact that *allameng* is probably to be connected to CSY *qaywalemnga*, Nauk. *qaywallaməŋ* (see under *qaywa*) and CSY *naqamallameng*, Nauk. *naqallaməŋ* (see under *naqam*).

ama (VDa-62; MEc-229-30; MEi-64); Sir. *ama* (104); Nauk. *ama* (JACa-4), *amə* (335) 'and; also'.

This could be either from the CSY demonstrative particle *ama* 'over there, on the other side' (BAb-32) or from Ch. *amə*, *aməŋ* 'also, even, furthermore' (MO-147; BOe-850, 853; NE-204-5, SKc-332, 339-42, 345, 351; NEa-245); Koryak *iml*, *imiŋ* 'also' (BOe-875), *aməŋ* 'always' (ZHa-290, 294, 299, 302). CONJ for clauses as well as noun phrases.

Nauk. *amalli* (310-11); Imakl. *amali* (170, 174, 175) 'maybe'.

amalleqa 'also, on the other hand, then again' (BAb-30; RUa-66-67; MEc-229-30; NBK/6-50, 51; SLe-20, 38, 39, 42; AN-20, 21, 48; APc-104, 106, 130, 134, 140, 142, 172, 204, 208; IRR-21; NBK/5a-41) (id.). ADV-CLI, VI.

amallu 'and also, especially' (not in BAb; not in RUa; HEN-16; GOL-pc).

amawha 'and whenever, then only; repeatedly, again and again' (BAb-30; RUa-67; BO-84; NBK/7-14'-15'; NBK/8-27).

amawhanguq (not in BAb; not in RUa; SLd-9, 14; PU-14; SL-15).

amalka 'correctly; in the proper, traditional way' (a very tentative translation, inferred from a few texts; it does not correspond to the translation given in Soviet works) (not in BAb; not in RUa; SI-54; NBK/7-54; PU-31; AN-1, 4, 36, 48, 50; APc-16, 18, 178, 180, 222, 236-38, 240, 242, 244; IRR-10-12, 14, 22, 23; TOO-pc); common in some SLI texts only, particularly by older speakers; Nauk. *amalka* (310, 313); Imakl. *amalka* (170, 175) 'almost; as far as'.

No corresponding Chukchi word has been found; there is, however, Koryak *emelke* 'it is good; all right; it is permissible' (WRa-363-64; ZH-676; ZHa-300-301). According to these sources, *emelke* contains the adverbializing affixes *e-* and *-ke* and the stem *mel* 'good'. Thus, if CSY *amalka* is indeed from Koryak, it is clear that it could not be analyzed as CSY *ama* with a suffix *-lka*. ADV-CLI, VI.

amalkaun (not in BAb; not in RUa; SLa-16).

amen (MEc-229, 246, 270-71; MEi-64); Sir. *amen* (103); Nauk. *amən* (321; MEi-64); Imakl. *amən* (182-83, 185) 'then; but; come to think of it', sometimes with some exasperation.

Ch. *a'mən* [ʔamən] 'and then unexpectedly' (seems to introduce an unexpected event, or an entirely new idea, to which emphasis is given) (MO-17; BOe-853, 857, 888; SKc-336, 359-60). ADV-CLFR, INJ.

amenam (BAb-31; RUa-72); Sir. *amenem* (104, 179), *amen'em* (100, 102), *amenam* (102) 'so then, unexpectedly; but instead, why not instead' (id.).

Ch. *a'mənəm* 'and then unexpectedly', sometimes with displeasure; 'but really' (not in MO; BOe-852-53; WRA-356; SKc-350, 358, 361). ADV-CLI, INJ.

amenamnguq (T/43-20).

amennguq 'then, it is said' (BAb-31; not in RUa; NBK/5a-44; SLb-12; PU-5; SLc-14).

amenqun 'remember; you know' (BAb-31; RUa-72; NBK/5-31-32, 40; NBK/7-31, 56; NBK/8-71-72; BA-64; APc-10, 86, 178-80, 210, 218) (id.).

ametall (WA, not in BAb; RUa-72; MEc-207; not in MEi); not known by TOO-pc, but recognized as SFE by WON-pc; Sir. *ametall* (102); Nauk. *aamətal* (MEi-64) 'still; yet'.

Ch. *emlte't* 'at once, just now' (not in MO; BOe-857); according to MEi-64, maybe from Ch. *əməl'etə* 'all together; wholly' (MO-147). See also *aamta*, *ameta*. ADV-CLI.

aamta (BAb-32; RUa-70; MEc-229-30; not in MEi), **ameta** *Ungazighmiit* form according to TOO-pc, rejected by WON-pc; Nauk. *amta* (319, 322, 325) 'as we know from our experience; as we well understand', used in conversation.

Ch. *amto* 'well?, what news?, and how is it?' (not in MO; BOF; BOe-886); Koryak *'amto* (greeting when one meets); used by men (ZHa-288; BOe-886). ADV-CLFR

aamtaam 'if that can't be; if that isn't so; if that is so' (BAb-32; RUa-70; MEc-229-30, 235, 238; AN-introd.; APc-88) (id.).

aamtawha 'maybe; probably; trying fruitlessly; again, in the way we know he does it' (BAb-32; RUa-70; RU-125). ADV-CLI.

aamtayaq (not in BAb; not in RUa; OT-10; AN-38, 59) (id.).

aamtayaghhaq 'how well we know' (BAb-32; RUa-70) (id.).

Nauk. *amtalleqa* (325).

amwaari, emwaari 'in the past' (BAb-33; not in RUa; not in MO); BAb-33 is the only attestation of this word that I have found; it is rejected by TOO-, WAGa-, WON-, and GOL-pc. TOO-pc and WAGa-pc pointed out that *Amwaari* is a personal name, spelled *Omwaari* in English.

arekull (not in MEi); according to IR-pc and GOL-pc, hardly used; it is found in SLI texts, in the dictionaries, in WA, known to TOO-, WAGa-, WON-pc, and even used by IR-pc, so I assume TOO's and GOL's statements refer to younger speakers only; Nauk. *arukull* (311) 'but it had already happened'.

Ch. *arəkul* (not in MO; MEd-126); this spelling is incorrect since vowel harmony is not respected. ADV-CLFR.

areku-ull 'Ha!, Wow! that's what turned out!', expressing surprise or admiration (GOL-pc). INJ.

arekulnguq 'but it had already happened' (SLa-44).

arekulnguq 'but it had already happened' (BAb-43; RUa-72, SL-9).

ananut (SFE) (the only SLI attestation is WA; not in BAb; RUa-97; RU-127; VDa-61; MEc-232; MV-237; MEi-66); Sir. *acanur* (104); Nauk. *esur* (497; MEi-66) 'only if; if only'.

Ch. *ecenut* (MO-158), *ecenur* (MO-158; BOe-859; SKc-318), *eču'ur* (not in MO; BOe-859) 'it shall be this way'. CONJ.

asunan (BAb-44; not in RUa; NBK/8-31), **asunaq** (BAb-44; not in RUa; NBK/8-31) 'soon'. Probably related to either the entry above or the one below.

asunga (SFE) (not in BAb; not in RUa; MEi-64, 66); Nauk. *asunga* (401; MEi-64, 66); Imakl. *azunga* (74, 82, 171, 225) 'come on; you'd better; and also'. According to MEi-64, 66, from Ch. *ecenci* 'moreover; and better' (MO-158).

Imakl. *azungaqtaung* (174).

ataak (BAb-44; RUa-97-98; VDa-38; MEc-207, 271; not in MEi), **aataw** (not in BAb; RUa-99; MEc-207, 271; MEi-64), this form rejected by TOO-, WAGa-, WON-, GOL-pc; Sir. *ata* (103), *ataw* (100); Nauk. *ataw* (322, 326, 328), *ataw* (319, 321; MEi-64), *aataw* (MEg-182); Imakl. *ataw* (171, 175) 'do it anyway; give it a try; come on; I'll try, let's', used to boost one's own or somebody else's morale; the variants ending in <w> should probably be spelled *aatakw*, and are probably more conservative forms than *aataak*; compare *nunmaakw* and *nunmaak*, q.v.

Ch. *a'taw* [ʔataw] 'without purpose; for no particular reason; it does not matter; in vain' (MO-18; BOf-150; BOe-845, 860; SKc-329, 360); Koryak *'ataw*, *awaw* 'but; you see' (ZH-678; ZHa-287, 298); Alutor (Palanski dialect) *'ataw* 'but' (ZHe-124-25). ADV-CLFR.

Imakl. *atagum* (177, 185-87).

Sir. *atawgem* (100); Ch. *ata'um* 'to no purpose' (BOe-854).

atawha 'you know; you see (?)' (BAb-45; not in RUa).

aatawhsi '(an equivalent of *aataqun*)' (not in BAb; not in RUa; WON-pc) (id.).

Imakl. *atawsigun* (171, 175).

aataglegan (not in BAb; not in RUa; SLd-24), *aatawlegan* (not in BAb; RUa-99). Ch. *attau' li'en* 'utterly in vain' (not in MO; BOe-868).

aatawleginaq (not in BAb; RUa-99).

aataqun (not in BAb; RUa-97; MEc-207, 261, 271; MEi-64), *aatakun*

(BAb-44; not in RUa; NBK/5-33; NBK/6-29; NBK/8-3; PU-25-27),

aataqun (BAb-44; NBK/5-33); this form rejected by TOO-pc; Sir.

ataqun (180), *atequn* (102), *atawqun* (100); 'do it anyway; give it a try; you try; at random; for no particular reason' (id.).

Ch. *a'tawqun* 'just' (not in MO; MEd-126-27; BOe-854). INJ.

Imakl. *ataka* (182-84; MEi-73).

atgenra 'it happened although we no longer wanted it to; too late, after it's not really needed anymore' (BAb-45; WA; not in RUa; not in MEi). Probably from Ch. *ačhē'mira* 'moreover' (not in MO; BOe-854). ADV-CLI.

atgenraawan 'not in time; towards the end' (not in BAb; RUa-103) (id.).

Ch. *ečhinre'wan* 'oh, goodness!' (not in MO; BOe-888)

atwhay 'oh yes, now I remember what it was I wanted to say; I forgot to tell you but now I remember' (BAb-46; RUa-103; BA-4; AN-32; SLa-27; not in MEi). Probably from Chukchi, but no evidence has been found yet. INJ.

atwhaynguq (not in BAb; not in RUa; PU-33).

awen (not in MEi); Sir. *awen* (100), *awer* (100, 102); Nauk. *aawen* (JACa-7) 'usually; occasionally; on and off, with intervals'.

Ch. *ewən-* 'actual, principal' (MO-152; BOe-855). ADV-VI.

aweniwling (not in BAB; not in RUa; MEc-207, 271; MEi-64); the correct spelling for this is probably *aweniwleng*, see also *iwleng*; Nauk. *awəneewləŋ* (310), *awəneewlən* (311) 'constantly'.

Ch. *aweniwlən* (MEc-207; MEi-64), *awəniwlŋ* (MEc-271) (not in MO) 'constantly'.

Sir. *kiin-awer* 'someone' (185).

Sir. *qaku-awer* 'from somewhere' (186).

awi, awii (BAB-50; RUa-107; MEc-251, 270-71; MEi-64); Sir. *awe* (100), *awi* (104); Nauk. *awgi* (319-21; MEi-64) 'is that so, really?; now I see, now I realize'.

Ch. *ew* (MEd-127; MEi-64), *ewi* (MO-151; BOe-885, MEd-127; MEi-64; SKc-335, 360) 'so!' (expressing disapproval). INJ.

awilleqa (BAB-50; RUa-107; NBK/8-30), *awilleqa* (SI-40; BAa-67) 'I guess so; aha!' (id.).

awiim 'I think, guess so'; the difference between this and *entaqun* (see under *enta*) is not clear (BAB-50; not in RUa; NBK/6-13; PU-3-5, 27, 28; SL-5; BAa-54) (id.).

Ch. *awiəm* 'probably' (MO-151).

awiimam 'I think, maybe' (WA; not in BAB; RUa-107; TOO-, WON-, GOL-pc) (id.).

awiinam 'I guess so' (BAB-50; not in RUa; a form rejected by TOO-, WAGa-, WON-pc and corrected into *awiimam* by GOL-pc).

awiinawan or *awenawen* (form and meaning unclear) (not in BAB, not in RUa, TOO-pc) (id.).

awiinawi 'so it's true' (BAB-50; SI-40; not in RUa; a form rejected by TOO-, WON-, GOL-pc) (id.).

awituquq 'I guess so' (BAb-50; not in RUa; a form rejected by JT, NW, GOL-pc).

awituwaq (BAb-50; RUa-108; MEc-207, 271; MEi-64); Sir.
awituwaghh (103) 'I guess so' (id.).

Ch. *awetəwaq* 'suddenly, at once, unexpectedly' (MO-9; BOe-852). ADV-CLI.

emta 'this time act differently; for a change, instead; (with negative commands:) again' (BAb-57; RUa-578; not in MEi).

Ch. *ə'mto* [ʔəmtə] 'suppose, what if' (MO-150); Koryak *əmtə* 'suppose, what if?' (RU-125), according to this author, this is the origin of CSY *aamta*; according to BAb-57, *emta* is an equivalent of *miita*. ADV-VFR, INJ.

emta-a (SL-14).

enan (BAb-57; RUa-579; VDa-62; MEc-230, 248, 271; MEi-65; BA-47; PU-26-27); Sir. *enan* (104); Nauk. *ənnan* (311), *ənan* (MEi-65) 'and then, and further; later on!, when better conditions prevail'.

Ch. *ənan* 'he (exhortative)', in the Absolutive singular case (MO-147; BOe-850, 854, 875; SKc-316, 320, 333, 334, 351). ADV-CLFR, INJ.

enanaayuk 'maybe' (WA, not in BAb; RUa-579); analysis unclear.

enankin 'let other(s) do it because they are better able to; better let him do it' (BAb-57; RUa-579; WA; RU-136; PU-29, 33; OT-65-67) (id.).

Ch. *ənanken* 'oh my!' (MO-147; RU-136; BOe-887).

enankinam 'oh no, not again' (BAb-57; RUa-579-80; BO-84; NBK/8-1); known to WAGa-pc (id.).

Ch. *Ina'nkên ūm* 'oh my!' (not in MO; BOe-887).

enankinamllu (WA; not in BAb; not in RUa).

enankintuq (not in BAb; not in RUa; SLc-38).

enannguq (not in BAb; not in RUa; MEf-31).

enekiitek (SFE) (BAb-57; RUa-581; MEi-66); not known to GOL-pc; "not used anymore" (TOO-pc), **inekiitek** (not in BAb; RUa-169), *nekiitek* (a less accurate spelling in MEc-230, 235, 238); Sir. *enekitek* (103, 202); Nauk. *ənəkītək* (321-22; MEi-66), *inəkītək* (322, 329-30, 332) 'if, when, well maybe, as a matter of fact (?)'.

Ch. *ənəkīt* 'all at once; (in coordinate clauses:) as soon as' (MO-148; BOe-850-51; SKc-339, 340, 345, 348). CONJ.

enekiiteghqun 'if only' (not in BAb; RUa-581).

enkaam (VDa-62; MEc-227, 230, 271; MEi-65); Sir. *enkam* (104); Nauk. *ənkam* (321-22, 325, 330; MEi-65) 'then, in temporal sequence; furthermore; and, also'; the difference with the originally Eskimo particle *taagken* 'and then, next' is not always clear; *taagken* puts more emphasis on new events in the sequence of actions; only *taagken* can be used as an interjection meaning 'next?, what happened then?'; *enkaam* does not occur in Imakl. (186).

Ch. *ənək'am* [ənəkʔam] 'and, then'; coordinating conjunction, to be compared with Ch. *enmen* and Ch. *ənraq* (CSY *enraq*); of these, *enmen* seems to express the least close temporal connection, *ənək'am* a closer temporal connection, and *ənraq* 'in turn', the closest (MO-147; BOe-854, 858; SKc-314-17, 339-41, 350; NEa-242-43). CONJ, for clauses, and especially in the SFE, also for noun phrases; generally more common in the SFE than on SLI.

enkaamall 'and then again' (BAb-57; not in RUa); a variant of *enkaamill* (?) (id.).

enkaamam 'and then again'; a variant of *enkaangam* used by Nick and Walter Wongittilin (*Qrwaaghamiit* clan), also common in the SFE, and heard on the Soviet radio (BAb-57; RUa-578-79; NBK/8-61, 63, 66, 68; APc-172, 175) (id.).

enkaamamam (not in BAb; not in RUa; WON-, GOL-pc) (id.).

enkaamamngam 'and then again' (BAb-57; RUa-579).

enkaamangam 'and then again' (BAb-57; not in RUa), probably a mispronunciation for the preceding or for the following:

enkaamngam 'and then again' (BAb-57; not in RUa; NBK/8-1; APc-216).

enkaangam 'and then again' (BAb-57; not in RUa); on SLI, much more common than *enkaamam* (id.).

enkaangangam (not in BAb; not in RUa; TOO-pc).

enkaamill (JAa-69; RUa-579), *enkamill* (WA) 'well; you see, is it not?' (not in BAb); "old word" (TOO-pc) (id.).

Maybe from Ch. *En'ke'mlr*, *En'qe'mlr* 'moreover' (not in MO; BOe-851), or from Koryak *ənkemil*, *ənkemic* 'like him' (ZHa-280-81).

enkaamllu 'and also' (BAb-57; not in RUa; NBK/6-56).

enkaamnguq (not in BAb; not in RUa; BA-67; SLc-1; SL-3; SLb-17).

enmis (BAb-57; RUa-579; MEc-242, 271; MEi-66), **enmit** (TOO-pc; rejected by WON-pc), **inmis** (RUa-167), variant used by IR-, TOO-pc, **inmit** (TOO-pc); "old word" (TOO-pc); Sir. *enmir* (102, 104), *anmar* (179), *anmat* (179); Nauk. *enmet* (319; MEi-66), *ənmis* (MEi-66) 'already (surprising though it may seem), unexpectedly; time flies!'.
 Ch. *enmec* 'because; already' (MO-156; BOe-859; NE-205; SKc-316, 342-43, 345-46, 350, 359). ADV-CLI.

enmisnguq (not in BAb; not in RUa; SLc-105).

enngaatal The SFE variant (BAb-57; RUa-580; RU-113, 157; VDa-61; MEc-242, 249, 269; MEi-66); it is rare but attested in SLI texts (IRR-8-9, 12-16); Branson Tungiyān (personal communication) states that this is a variant used by the

Napakutaghmiit and by the *SanighmeInguut*, two clans originally from the SFE (see chapter 5, subsection 5.2.1); **elngaatal** (BAb-56; not in RUa); by far the most common SLI variant, apparently unattested in the SFE; Sir. *enngatal* (100-102); Nauk. *ənngatal* (311, 317; MEi-66); Imakl. *ənngatən* (173-74) 'extra, more so, really; for example; lately, now', implies a little more than usual, more than expected, more than before, mainly used as a reaction to previous discourse, by the speaker himself or by somebody else, that is considered a slight understatement; it has exactly the same connotations as the French colloquial expression *je dirais même plus*.

Ch. *ənɣatal* 'exceptionally; this time' (not in MO; SKc-311, 316; BOe-851, 860), *ənɣatek* (MEi-66), *ənɣateq* (MO-148; BOe-845) 'of late'. ADV-CLFR (most often CLF), VFR.

elngaatalnguq (not in BAb; not in RUa; SLa-23, 31).

elngaatalnguq (not in BAb; not in RUa; AN-14, 15; SEP-9).

elngaatatlu 'very much also' (BAb-56; not in RUa; NBK/8-35, 37, 38, 40; IRR-24, 25).

Sir. *enngatalem* (100).

enraq (VDa-62; MEc-230, 233-34, 270; MEi-66); Sir. *enraghh* (104), *enzaghh* (202); Nauk. *ənraq* (314, 322, 326-27; MEi-66) 'but; yet; still; however' (with the implication that this condition will cause a change in plans or expected outcome).

Ch. *ənraq* 'in turn'; coordinating conjunction, see discussion under *enkaam* (not in MO; BOe-858; SKc-342-43). ADV-CLFR, also occurs in second position in a clause.

enraghngam (not in BAb; not in RUa; APc-82, 220).

enraghnguq (not in BAb; not in RUa; SLd-13; SLc-15-16; SLa-39).

Sir. *enraqkem* (202), *enraqem* (104).

enraqlu (WA; not in BAb; RUa-580; SLd-24; SL-22).

enta (RU-131; MEc-267; not in MEi); Sir. *enta* (102, 202); Nauk. *əta* (336, MEi-66); 'come on, let's do it; well, let's go' (used when one has finished talking or when one is leaving).

Said to be from Chukchi by MEf-31 and MEi-66, but I have not been able to find a Chukchi word that is very close to it. According to BO-81a, this is an Eskimo word, corresponding to Ch. *anə* 'well then; come on; there you are' (MO-13; BOe-853-54); Koryak *əno, əna* '(affirmative)' (ZHa-287, 289). INJ.

entaa, enta-aa 'excuse me; let me see', expressing annoyance or an apology (BAb-58; not in RUa). INJ.

entagham 'enough' (not in BAb; RUa-580; MEc-220; not in MEi); according to MEc-220, composed of *enta* and an interjection *agham* 'well then'; this is most likely an SFE spelling of *ahaam*, q.v.

entaghamam 'enough, that will do!' (not in BAb; RUa-580, 602; MEc-219, 223, MV-242) (id.).

entaghamngam 'stop immediately' (not in BAb; RUa-604).

entaghamamngam (not in BAb; RUa-580).

entaaghangam (WA)

entami 'well, let's see' (BAb-58; not in RUa) (id.). INJ.

entaqun (BAb-58; MEc-222-23; RUa-580-81; WA); Sir. *entaqun* (102, 202); Nauk. *ətaqun* (319; MEi-66) 'I think, maybe, perhaps'; expresses the opinion of speaker; very common when the speaker has little confidence in the accuracy of his or her statements (id.). ADV-CLFR, VFR, INJ, freer than any other particle as far as position is concerned.

entaqunllu 'also maybe' (not in BAb; not in RUa; SLd-9; PU-26).

entaqunqun 'I think, you see' (not in BAb; not in RUa; WON-pc).

entaqunta (not in BAb; RUa-581).

Nauk. *ətaggum* (310, 313).

Nauk. *ətanraq* 'come on' (MEi-66); from *ətə* and *ənraq*, q.v.

Nauk. **esgi** 'when' (497; not in BAb; not in RUa; MEi-66).

Ch. *ecgi* 'as soon as; before; when about to' (not in MO; MEi-66; BOe-59; SKc-348); Koryak *ačhi* 'just now; before a little while' (BOe-849); *ecgi* 'today, now' (ZHa-284-85, 289, 297); Alutor (Palanski dialect) *ecgi, esgi* 'now' (ZHc-121, 124, 278).

Nauk. **ectə** 'evidently, probably' (310, 313; MEi-66)

Ch. *etə* 'evidently, probably' (not in MO; MEi-66; BOe-857).

Sir. *atəm* (101); Nauk. *ectam* (309-12) 'maybe'.

Ch. *etəm, etə-əm* 'evidently' (MO-158; BOe-857).

gaymaangi (SFE) (BAb-62; RUa-126; RU-99; VDa-61; MEc-219; 224, 270; MEi-64), **gaymangi** (WA), not known by TOO-, WON-pc; Sir. *gaymangi* (103); Nauk. *gaymangeen* (309-12; MEi-64) 'maybe, very likely; come to think of it'; probably connected with the form *gaymaawi* 'satisfactory, good in all respects' (not in BAb; RUa-126; not in MO; RU-491).

Ch. *gaymetə* 'funnily; fascinatingly' (MO-29); Koryak *gaymat* 'maybe' (ZHa-286-87, 298, RU-99); Alutor (Palanski dialect) *gaymat* 'or; maybe' (ZHc-124, 126).

getgeta (SFE) 'somehow, anyhow' (not in BAb; RUa-130; not in MEi).

Ch. *gətgəte* 'somehow, anyhow, against one's will' (MO-35; BOe-875).

gge '(ingressive pulmonic velar fricative signifying approval)' (BAb-63; not in RUa; not in MEi), rejected by TOO-pc; accepted by WON-pc as a Siberian way of saying 'yes'.

Ch. and Koryak *ggg* 'yes' (not in MO; BOe-884). INJ.

gigik 'ah! (exasperation, impatience)' (not in BAb; RUa-127; not in MEi).

Ch. and Koryak *gi, gik* 'ah!' (not in MO; BOe-884). INJ.

giniwan (BAb-64; RUa-127, 150; RU-290, 307; MEc-215, 235, 270, 271; MEi-64; TOO-pc), not known to WAGa-, WON-pc; Nauk. *gəniwan* (311-12, 314), *giniwan* (MEi-64) 'all the more so' (expression of hopeless expectation or longing).

Ch. *giniwen* 'besides, on the contrary' (MO-30 BOe-860, 875). ADV-CLI.

giniwanllu 'of course not; even better; more so' (BAb-64; not in RUa; GOL-pc), not known to WAGa-, WON-pc.

giniwannam '(expression of hopeless expectation or longing)' (BAb-64; RUa-127; NBK/8-passim).

guguk (not in BAb; RUa-128), *uuhuk, uhuuk* 'start!; go!' (BAb-241; not in RUa; MEc-267).

Ch. *gu, go* 'oh! (calls)' (MO-32; BOe-884). *guk* '(admiration, satisfaction); come on!' (SKc-358, 360). INJ.

guq (SFE) 'yes' (BAb-65; not in RUa; not in MEi), rejected by TOO-, WON-pc.

Ch. *guq, goq* 'oh' (not in MO; BOe-850, 852-54, 859, 884, 887). INJ.

guy (SFE) 'what (did you say)?, and?' (not in BAb; RUa-128).

Ch. *wui*, *goi* '(answer to call)' (not in MO; BOe-885). INJ.

iki 'one should not' (RUa-149), 'not now' (MEc-252; not in BAb; not in MEi);
Imakl. *igi* (182) 'yes'. *iki* is not recorded for SLI, but *ikiqu* and *ikiwan* are.

Ch. *iki* 'yes' (not in MO; MEg-182).

With clauses in the negative APO mood only (MEc-252).

ikiqu (BAb-74; not in RUa; SI-60; not in MEi), according to TOO-pc,
not used anymore; Sir. *ikiqu* (102) 'but yet; and still yet; but wait
until' (id.). ADV-CLI.

ikiwan (BAb-74; RUa-127; MEc-235; not in MEi; PU-24; AN-8; SLa-
31), *ikiwen*, a variant (not in BAb; not in RUa; TOO-pc); Sir. *ikiwan*
(102); Nauk. *ikiwan* (332); Imakl. *igiwan* (182-83; MEi-73) 'if the
other person(s) can (why can't we)' (id.).

Ch. *ikiwen* 'even' (not in MO; MEg-182), eke'in 'but' (BOe-860). CONJ,
ADV-CLI, VI, often with the CSO mood (MEc-239).

ikiifsin 'soon; at last', having to do with a desired event or thing (?) (BAb-73;
RUa-150; not in MEi; SI-60).

Ch. eke'upčt 'and now, but now' (not in MO; BOe-860). ADV-CLFR.

inqu (BAb-79; RUa-167; VDa-62; MEc-229, 235-36, 238, 271; MEi-64);
attestations in SLI texts are NBK/9-49 and SL-3; it is more common in RU texts
(NBK/6-55; BAa-47, 71-72, 78-79), and in the SFE. It appears to be pronounced
iinqu or **iingqu** on the Soviet radio. Sir. *inqu* (102); Nauk. *inqu* (322,
329-30), *iqqu* (MEi-64); Imakl. *iqu* (185-86), *iiqu* (187) 'just because; in
order to; of course'.

Ch. *inqu* (CO-257-74), *iqqu* (MO-44; SKc-339-40, 344-45, 348-49;
CO-251-52) 'in order that, in order to', i^onqu, representing [i^onqu] ? 'lest'
(BOe-861). CONJ.

inquamen (not in BAb; RUa-167; MV-238; SLc-40; IRR-25).

inwa 'not even' (BAb-79; RUa-168; WA; not in MEi; PU-24; OT-10-11; IRR-8).
Probably from Chukchi, but no correspondent found yet. ADV-CLI, VI.

inwallu (not in BAb; not in RUa; SLA-21).

inwaamllu 'not even' (BAb-79; not in RUa; T/43-30) (id.).

ipa 'truth'; a noun (BAb-79); according to other sources, also a PT 'true' (RUa-173; VDa-61; MEc-222; not in MEi); Nauk. *ipa* (311, 314, 316); Imakl. *ipa* (170, 174-75) 'true'.

Ch. *ipe* 'actually' (MO-44; BOe-860; SKc-318); Koryak *i'pa* 'really' (BOe-877). According to MEc-222, *ipa* is etymologically Eskimo, but this does not appear likely. ADV-CLI, INJ.

ipallu 'not necessarily so' (BAb-79; RUa-173).

ipapestaaq 'of course, certainly, truthfully' (BAb-79; RUa-173; NBK/10-14, 15, 18) (id.).

ipapik (not in BAb-79 as a PT; RUa-173; MV-242; not in MEi); Sir.
ipapigg (183) 'true' (id.). ADV-CLI, INJ.

ipapiwaaq 'seriously; earnestly' (not in BAb; RUa-173) (id.).

ipawha (not in BAb; not in RUa; PU-27).

isi (not in BAb; not in RUa; SI-68; SLA-73), **isigima** 'I thought (mistakenly) that...' (BAb-82; RUa-174; SI-68; NBK/4-56; not in MEi).

Probably from Chukchi, but no correspondent found yet. ADV-CLI, always with a Participial (INP or TRP) mood.

isinguq (not in BAb; not in RUa; SLc-73).

isigimaqun (not in BAb; not in RUa; AN-3) (id.).

itararat (MEc-225), **itararay** (MEc-266) (SFE) (interjection signaling real or imagined danger) (not in BAb; not in RUa; not in MEi).

Probably from Chukchi, but no correspondent found yet.

iitek (BAb-83; RUa-179; MEc-213, 229, 246, 270-71; MEi-64); Sir. *itegg* (183); Nauk. *itək* (310-11, 313); Imakl. *iitik* (171) 'at least; sure, all right; still, but on the other hand', expresses mild assent after insistence or an adverse condition.

Ch. *itək* 'if; in reality' (not in MO; BOe-856, 860-61; SKc-345). ADV-CLFR, VI.

iitegam (not in BAb; not in RUa; WON-pc); Sir. *iteghhem* 'in that case' (100) (id.).

Ch. *itəkəm* 'if' (not in MO; SKc-345-46).

iitegmisa 'if this is the case' (not in BAb; not in RUa, BO-81b) (id.).

iitegngam 'usually; always; anyway' (BAb-83; RUa-178-79; NBK/8-3; AN-17, 22; APc-94, 111-12; SLa-11).

iitegnguq (not in BAb; not in RUa; KAa-51; PU-27).

iitekqun (BAb-83; RUa-178; RU-62), *iitekqun* (BAb-83; BAa-52), *iiteghqun* (TOO-pc), *iitequn* (NBK/1-69) 'perhaps; usually; you can see'.

Ch. *itəkqun* (not in MO; RU-62).

iiteklu (not in BAb; RUa-179).

itupill (BAb-83; RUa-177; WA; MEi-66); Sir. *itupill* (183); Nauk. *etopell* (KRAb-184), *etopill* (MEi-66) 'perhaps it is better that..., preferably'.

Ch. *et'opel* 'better, preferably' (MO-158; BOe-847, 857-58). Maybe a compound of *et'o-* 'a little' and *-pil* 'dear little' (BOe-791, 815); Koryak (Kamenski dialect) *itu^Epil* 'after a while' (BOe-847). ADV-CLI.

itupilqun 'perhaps; likely' (BAb-83; RUa-177).

itupik a variant of *itupill* (?) (not in BAb; not in RUa; TOO-pc), rejected by WON-pc.

Nauk. *ituwaqall* (meaning uncertain) (JACa-5).

iiwen (BAb-84-85; RU-93; VDa-62; MEc-229, 235-38, 270-71; MEi-66); Nauk. *eewən* (JACa-8), *eegun* (318, 322, 329-32; MEi-66); Imakl. *eegun* (182, 185-87) 'if, or else; just when, just at that time, just before that time; once again, still'.

Ch. *e'un* '(connective indicating a weak temporal succession)' (not in MO; BOe-855); Ch. *ewər* 'if, and' (MO-152; SKc-317, 319, 331, 339, 345, 348, 350-51; CO-251-52); a connective with added connotation 'at that time', refers to two events taking place at the time; also used as a conditional 'this time if; at the time when'; *e'un*, i.e., *ewən* and *ewər* are not identical since only *ewər* is used as a connective between separate verbs or nouns (SKc-317, 331; BOe-55-56, 861); Ch. *ewət* 'if, and' is a variant of Ch. *ewər* (MO-152; BOe-861); Koryak *ewə*, *ewən* 'really; without fail' (ZHa-286-87, 302, 304). CONJ, ADV-CLI, in initial or second position in the clause; there appears to be a correlative CONJ set *iiwen...*, *iiwen...* 'just when..., then...' or 'every time when..., then...' (GOL-pc), at least in Naukanski, often with the CDO mood (MEi-75).

iiwenllu 'just when, right at, just as' (BAb-85; RUa-72; MEc-229, 270); slightly more common in RU's texts from the SFE; SLI examples are in SLe-40-41; and GOL-pc. CONJ.

iiwenllunguq (not in BAb; not in RUa; SLd-2, 18; SL-15; SLb-21).

iiwennguq (not in BAb; not in RUa; MV-241; PU-10; SLe-14; OT-15-16; SL-17).

iiwəḏqun 'just when' (BAb-85; not in RUa), 'just wait' (NBK/6-38).

iiwenwha (not in BAb; not in RUa; BA-33).

iwernga (MEc-229; MEi-66); a variant **igurnga** was heard on the Soviet radio; Sir. *iwernga* (104, 181); Nauk. *egurnga* (310, 322, 326-27; MEi-66), *ewarnga* (KRAb-184), *ewarna* (319), *ewurna* (KRAb-184); Imakl. *agwǝrnga* (185-86), *aʔwǝrnga* (185) 'but then, only, yet, anyway, however', mild adversative, is used regularly to render 'but' in translations from English (WY, HEN-passim).

Ch. *ewǝrɲan* (not in MO; MEc-207, 229, 271), *e'kwǝrɲa* 'however, but' (MO-159; NOR-214; BOe-856; SKc-342-43); according to MEi-66, from Ch. *ewǝr ǝnkǝ* 'at once; in succession' (MO-152), which seems unlikely. CONJ, ADV-CLI.

iwerngaam 'to satiety, to the limit' (not in BAb; RUa-181); Nauk. *egurngam* (310, 327) (id.).

Ch. *ǝkwurga-m* 'however' (not in MO; BOe-856), *iwerngallu* (not in BAb; NBK/6-57; RUa-181).

iwerngangam 'but then whenever' (BAb-85; RUa-181).

iwernganguq (not in BAb; not in RUa; SLd-15; SL-17; SLa-73).

iwerngaun (BAb-85; RUa-181; WA; SI-78, 114, 145; NBK/6-15; NBK/7-4, 8, 10, 15, 16, 56; NBK/8-63; NBK/9-51, 60; SLc-42; OT-7; SL-17; IRR-19; SLb-2, 13; BAa-31; MEc-207, 271); Sir. *iwerngaun* (102, 104); Nauk. *ewǝrngaun* (309, 312) 'but, I'm telling you'.

Ch. *ewǝrɲanqun* (MEd-126; MEe-312). CONJ.

iwerngaunnguq (not in BAb; not in RUa; SLa-26).

iiwleng 'every time; all the time; always' (BAb-85; RUa-180; WA; not in MEi); Nauk. *cewlǝng*, *cewlǝng* in *awǝncewlǝng*, *awǝncewlǝn* (310-11), see under *awen*.

Probably from the Ch. verb *iwletak* 'to stretch, extend' (MO-39). ADV-VFR, more often VF than VI.

iiwleghllak (not in BAb; RUa-180; IRR-5) (id.).

iiwlengwaaq 'all the time' (not in BAb; not in RUa; WY-35) (id.).

kaku (RUa-194), **kakuuy** (BAb-87), rejected by TOO-, WON-, GOL-pc, **kakguuy** (BAb-87), **kukguuy** (BAb-101), **kuukugg** (MEc-266), **kukugugg** (RUa-221), **kuy, kuuy** (BAb-104) 'oh, wow!' (exclamation of surprise, fear, wonder, or dismay at having undergone an experience), often repeated several times, most common in children's speech, but also used by adults, in particular when successfully hitting a hunted animal; GOL-pc; not in MEi.

Ch. *kako, kokkoy* 'wōw!, oho!' (used by men) (MO-50; BOe-886; SKc-358, 361). INJ.

katam (BAb-92; RUa-205; not in MEi; NBK/9-63, 66); Sir. *katam* (103, 185); Nauk. *katam* (309, 311, 313) 'barely, only'.

Ch. *ketem* 'just, just like' (MO-61; BOe-722, 873; SKc-330, 336).

Modifies nouns as well as verbs; when preceded or followed by a personal or possessive pronoun, means 'just, only; own' (SI-1, 56; NBK/8-66, 68, 74; NBK/9-53, 60, 68; SLe-41; AN-Aatqelleq, 1, 29, 48; SLa-20; GOL-pc).

Sir. *katamnam* (100, 185).

katamnguq (not in BAb; not in RUa; AN-15).

katamngwaaq (not in BAb; not in RUa; SI-104) (id.).

katamqun (BAb-92; RUa-205; SI-passim), more common than *katam*; Sir. *kataqun* (185) 'barely; only'.

keka (BAb-94; RUa-226; SLb-7; SEP-5; not in MEi), **keqa** (MEc-265); Nauk. *kəka* (423) 'ouch', first syllable often repeated rapidly several times, probably used by women only.

Ch. *kəke* '(women's interjection of surprise)' (MO-55; SKc-358-59), '(women's interjection of pain)' (HOO-21). INJ.

kergam (BAb-97; RUa-235; MEc-207; MEi-65); Nauk. *kərgam* (310-11; MEi-65) 'no sooner than; ready to act'; meaning not clear: according to TOO-pc, 'almost', and according to GOL-pc, 'completely'.

Ch. *klrga'm* 'well now' (not in MO; BOe-853, 870); according to MEi-65, from Ch. *qərəm* 'not, no' (MO-68), which is not likely. ADV-CLI.

kərgamqun 'particularly' (BAb-97; RUa-235; NBK/8-31; SLd-25; SLc-26, 33; AN-10; SLa-40), rejected by WAGa-pc; more common than *kergam*.

kərgamllaam 'as soon as, when' (not in BAb; RUa-235) (id.).

ketaatkin 'but unfortunately' (BAb-97; RUa-236; WA; not in MEi), known to GOL-pc; according to TOO-pc, not heard after he came from Gambell to Savoonga in 1917; used in Gambell, but not used by young speakers.

Ch. *kət'atke* 'only, in spite of; unfortunately, very bad' (MO-58, 59; BOe-870). CONJ.

ketamsaswha (SFE) (the only SLI attestation is WA; not in BAb; RUa-236; MEc-213); Sir. *ketamsaswha* (186); Nauk. *kətamsaswha* (309-10, 312) 'at once; suddenly, unexpectedly'.

Ch. *kətamcacwo*, *kətamcacgo*, *kətamcacwa* 'suddenly, unexpectedly'; containing Ch. *kl'tam* 'now then' (not in MO; BOe-856, 869-70), which is also found in Ch. *kl'tam qun* 'well then; this time' (not in MO; BOe-856, 870, 874).

ketwhelqun 'because (?)' (WA-38; not in BAb; not in RUa).

Ch. *kətwəl* 'if only; even if' (MO-57-58), *ki'tvil-qun* 'notwithstanding' (BOe-870). CONJ.

Sir. *kitkiteraghh* 'a little' (103).

Ch. *kitkit* 'a little' (MO-52; BOe-870); Koryak *kitkit* 'a little' (BOe-880; ZHa-280); Alutor (Palanski dialect) *kit'kit*, *kitkit* 'as soon as; hardly; almost' (ZHe-123, 125).

langetaq (not in BAb; RUa-304; WA; MEc-270; MEi-126; MEi-65), the variant as pronounced by TOO-, WON-, GOL-pc, *lengetaq* (BAb-106; not in RUa; not in MEi), according to TOO-, WON-pc, this is a Siberian word, hardly used; Sir. *lengeten* (189); Nauk. *langotaq* (MEi-65) 'in case; might, likely; I think'.

Ch. *leŋəteq*, *leŋotaq* (dialectal variant) 'well then, evidently, indeed, probably; really' (MO-73; BOe-868). Probably from Eskimo according to BO-81b, which does not seem likely.

legan, a variant *llegan* was heard on the Soviet radio; Sir. *legan* (104, 189); Nauk. *ləgan* (JACa-6), *lłagan* (313, 319, 332; MEi-65); Imakl. *lłigan* (172) 'and so, and just, so that; sure!; go ahead and do it' (RU-94; VDa-61; MEc-242, 247, 270; MEi-65), as an adverb its function is to urge the sequence of events on its normal and expected course; in Siberia, also used for 'yes', according to WON-pc.

Ch. *ləgen* 'and simply; and only, just' (restricted action) (MO-74; BOe-868, 872; SKc-318-19, 331-32, 348, 350-51, 356); Koryak *ləgan* 'even; simply' (ZHa-301; BOe-880). ADV-CLFR, also occurs in second position, INJ.

leganamen 'almost' (not in BAb; RUa-302); *leganmen* in BAb-105 is probably a typo for this.

leganiitek (not in BAb; not in RUa; MEc-207, 271; MEi-65); Nauk. *lłaganitək* (310) 'in vain; wrongfully'.

Ch. *ləgenitək* 'I tell you what (implying contempt); just really' (MO-74; BOe-861, 868).

leganllu (not in BAb; not in RUa; SL-3).

legannguq 'sure enough; there' (RUa-302; NBK/7-3', 5, 14'; SLd-23; SLe-1, 3, 4, 8, 48; OR-13, SL-3, 6, 9, 20, 22-23, 25; SLb-1, 4; SEP-2-4, 8).

leganqun 'and as though, and like; looks like; just' (BAb-105; RUa-302; WA; MEi-65; SLd-19; PU-30; OT-11; AN-13, 34-35, 39, 47; SL-3, 5, 8, 25; SLb-13; SLa-71; IRR-4, 7; MEc-207, 271; MEd-26), a variant *lleganqun* was heard on the Soviet radio.

Ch. *lægenqun* (not in MO; MEc-207, 271).

leganqunnguq (not in BAb; not in RUa; SLe-38; SL-4-5).

legantuq (not in BAb; RUa-302).

lengerit (SFE) 'every time, always' (the only SLI attestation is WA; not in BAb; RUa-303; not in MEi).

Ch. *læŋorit* 'usually' (MO-75).

llaaghan (RU-94; VDa-61; MEc-235, 251; not in MEi); Sir. *lagan* (189); Nauk. *llØghan* (336), *llogan* (310) 'certainly, really, I agree, surely; it's true'.

Possibly also from Ch. *lægen* (MO-74), see above under CSY *legan*. ADV-CLI.

llaagha-an 'is that true?' (GOL-pc). INJ.

llaaghanam (WA; not in BAb; not in RUa; SLd-3, 6, 18, 20; SLe-32, 42; AN-34; SL-10; SLa-45) (id.).

llaaghanamnguq (not in BAb; not in RUa; PU-16, 27; SL-12, 17; SLa-44, 76; SLe-105).

llaaghannguq (not in BAb; not in RUa; PU-30; SLe-5; SLb-9; SLa-9, 19, 27)

llaaghanwha 'and so; at last' (BAb-107; RUa-308-9; WA; RU-95; MEc-244; MV-238, 240) (passim in SFE texts of RU, in SLI texts, apparently common only for some speakers, and maybe more common in Gambell (NBK/1-42, 45; BA-51; KAa-49, 51; SLd-3, 5, 6, 7, 8, 20, 31, 36; SLc-4, 6, 10, 16, 21, 31; AN-8, 17, 24, 26, 47; OT-13-15, 22, 25; SLb-23-24; APc-86, 212; IRR-9, 11; APa-3; APb-8).

llaaghanwhanguq (not in BAb; not in RUa; SLd-5; SLc-7).

llaaghanwhaqun 'consequently, therefore' (not in BAb; RUa-309).

llaaghinaan 'I'm glad; it turned out well' (WA; not in BAb; not in RUa; not in MEi; NBK/8-70; BA-50; SLc-107).

Probably from Chukchi, but no correspondent has been found yet.

llaaghinaannguqlu (not in BAb; not in RUa; BA-50).

llangaqa (BAb-107; RUa-309; WA; SI-85; MEc-207, 230, 235, 241, 271; MEi-65) 'looks as if; looks like it; sounds like it; apparently'.

Also from Ch. *leretaq* (MO-73), according to MEi-65; see under CSY *langetaq* above. ADV-CLI, VI, often with the INP mood.

llangaqa-a (SL-15)

llangaqanguq (not in BAb; not in RUa; SLd-4-5; SLc-4, SL-15; SLa-37).

llangaqaqun (not in BAb; RUa-309).

lleqa 'it turns out, on the contrary' (not in BAb; not in RUa; MEc-220, 221; not in MEi), differs from *arekull* or *qesikqun* (q.v. under *qesik*) in that a contrast or an opposite is emphasized; Nauk. *lliqa* 'even; it happens that' (439); the Nauk. form might actually be related to *llangaqa* above if it underwent the typical Naukanski sound change */aŋa/ > /ii/, as in CSY *whanga*, Nauk. *wii* 'I, me'. *lleqa* is common in all sources as the second element of compounds with other particles. Examples are: *amalleqa*, *awiilleqa*, *qaywalleqa* (q.v. under *qaywa*), and

tanemlleqa 'and then again' (BAb-223; NBK/8-1; PU-7; APc-18, 21), containing the etymologically Eskimo particle *tanem* 'finally, once again' (BAb-223).

Probably from Chukchi, but no evidence has been found yet.

luuraq (BAb-107, 161-62; WÄ; SI-77; NBK/1-31; OT-4; RUa-303; MEc-219, 230, 270; MEi-65), **lluuraq** (MEc-322); Nauk. *lluraq* (310, 322, 328; MEi-65) 'in case; maybe, might be, perhaps', referring to the future.

Ch. *yu'raq* (BOe-862), probably incorrect spelling, or a loan from Alutor, since vowel harmony is not respected, *lureq*, *yureq* (MO-75, 161; MEd-126, 129) 'perhaps'. Maybe also connected to Ch. *luur* 'after that, thereupon (referring back to a preceding event)' (MO-75; BOe-868-69). ADV-VI, often with the CDO mood or with the VFO mood.

luuraqlu (not in BAb; RUa-303; BAa-51).

masingka This form is known as a particle by TOO-pc; not obtained from WON-pc; definitely not known by WAGa-pc (8-37-41), given in BAb-113 as a noun only (see *masingke-* in subsection 6.2.1), all Soviet sources have **masinka** (RUa-320; VDa-61; MEc-207, 271; MEi-65); Sir. *macinka* (104, 190); Nauk. *mesinkə* (309-10, 312), *mesənkə* (317), *mesəнки* (MEi-65); Imakl. *mesitki* (174-75) 'quite, fully, enough; completely'.

Ch. *mecənkə* 'well, very well; quite, fully, enough' (MO-82; BOe-842, 860, 871).

masinkangam (not in BAb; RUa-320).

masisu (WA; not in BAb; RUa-320; RU-337; VDa-62; MEc-233, 249, 271; not in MEi), **maasisu** (not in BAb; not in RUa; MEi-65); this particle is rare on SLI, but known by TOO-, WON-pc; Sir. *macecu* (103), *macicu* (104); Nauk. *meesisu* (MEi-65) 'even, already, moreover; however'.

Ch. *mecic'u* 'besides' (not in MO; MEd-127; MEi-65; BOe-864). ADV-CLI.

masisuqruk 'dam it, who does he think he is!' (not in BAB; RUa-320) (id.).

meriiwen, meliiwen '(meaning uncertain)' (not in BAB; not in RUa; not in MEi), volunteered by TOO-pc as a variant of *miiwen* (q.v.), rejected by WON-pc.

Possibly composed of the Ch. prefix *mel-* 'like' (SKc-270; BOe-816, 864) and *iiwen* (q.v.).

miita (SFE) Maybe this is the SFE form for *emta* (q.v.) (BAB-118; RUa-328; MEc-207, 212-13, 271; MEi-65), rejected by TOO-, WON-, GOL-pc; Nauk. *miita* (MEi-65) 'this time act differently; for a change; in advance; beforehand, in good time'.

Ch. *mit'e* (MO-78; BOe-864), *mitge* (MEc-213) 'of course; beforehand'; maybe also related to Koryak *met'arj* 'well, good' (ZHa-296).

miitalgi (not in BAB; RUa-328-29; MEc-207, 233, 244, 248, 271; MEi-65), rejected by TOO-, WON-, GOL-pc, *miitalegi* (MEc-233); Sir. *mit'algo* (104); Nauk. *mitalgi* (MEi-65) 'roughly so; approximately' (id.).

Ch. *miteli'i* 'undoubtedly' (not in MO; BOe-864).

miiwen (SFE) (BAB-118; RUa-329; MEc-219, 250, 270; MEi-65), *Ungazighmiit* word according to TOO-pc, rejected by WON-, GOL-pc; Sir. *mawen* (104); Nauk. *miiwən* (310; MEi-65) 'maybe'.

Ch. *mewən* (not in MO; MEc-126; MEi-65).

miiwenllu (not in BAB; RUa-329; MV-242); Sir. *mawenllu* (198).

miiwenqun (not in BAB; RUa-329).

naqam (VDA-62; MEc-230, 271; MEi-65); Sir. *naqam* (104); Nauk. *naqaam* (JACa-6) *naqam* (310, 313, 322, 327; MEi-65); Imakl. *nagham* (177, 182-83) 'but instead; in that case, alright then, instead, then', mild adversative, less common than *iwernga*, sometimes expressing reluctant agreement.

Ch. *naqam* 'however, but, nevertheless' (MO-82; BOe-850, 853, 855, 859, 862, 865-67, 869, 871; NE-205; SKc-313, 339, 342, 348, 350, 360); Koryak *naqam* 'but' (ZH-678). CONJ, ADV-CLI.

naqamalla 'I envy you' (not in BAb; RUa-349; not in MEi; SI-80, 119; NBK/5-30; OT-2; AN-7; IRR-1; SLa-15) (id.).

naqamallameng (not in BAb; not in RUa; NBK/7-25); Nauk. *naqallaməng* (449) 'I envy you' (id.).

Possibly from Ch. *na'qam lū'mña* 'after all that has happened (literally "but again")' (not in MO; BOe-865-66).

naqamill 'in that case; consequently' (BAb-128; not in RUa) (id.).

naqamllu (not in BAb; RUa-50; SLd-29; PU-6; SLe-25; APc-111-12).

naqamnguq (not in BAb; not in RUa; SLb-1).

naqamqun (not in BAb; RUa-349-50; SLd-31; PU-2, 11, 29; SLe-22, 39).

naqamwan (not in BAb; RUa-350) (id.).

nikim 'as if, just because; "this is the impression you're making"' (BAb-137; not in RUa; not in MEi).

Ch. *nekem* 'especially; well, allright' (MO-90). ADV-CLI, VI.

nikimqun 'as if; just because' (BAb-137; RUa-371; OT-9; AN-59), more common than *nikim*.

nunmaakw (BAb-140; RUa-378; MEc-207, 271; not in MEi), **nunmaank** (BAb-140; not in RUa; MEi-65); this is the more conservative variant, preferred by older speakers; Sir. *nuntemʔaw* (192); Nauk. *nunmaakw* (MEi-65) 'slowly, very progressively'.

Ch. *nuntəm'ew* 'quietly, cold-bloodedly; reasonably' (MO-83). ADV-CLFR, VI.

nunmaaggaq 'slowly' (BAb-140; not in RUa) (id.).

nunmaawhaq 'slowly' (BAb-140; RUa-379), more conservative variant of *nunmaaggaq*, preferred by older speakers (id.).

paninang (WA; VDa-62; MEc-235, 239, 270-71; MEi-65); Sir. *paninang* (104), *paninaten* (100); Nauk. *panenang* (310-11, 321, 332; MEi-65) 'still, yet'.

Ch. *penin*, *panena* 'as before; previous, former' (MO-105; MEd-127; BOe-846, 848, 871; NE-204; SKc-341); Koryak *pa'nin*, *pa'nen* (BOe-848). ADV-CLI, VI, often preceded by a clause with a verb in the CSO mood (MEc-239-40).

pefaay (variant of *pellaay*, q.v.) (not in BAb; not in RUa; not in MEi; NBK/7-37). INJ.

pellaay (variant of *tefaay*, q.v.) (not in BAb; not in RUa; not in MEi), used by TOO-pc.

Possibly related to Ch. *pl'agi* 'that is all!', from the verb *plətkuk* 'to finish, end' (MO-100; BOe-864). INJ.

puuru (BAb-165; RUa-425; VDa-62; MEc-230, 271; MEi-65), accepted by TOO-pc, rejected by WON-pc; according to GOL-pc, it is "slang" and hardly used, **puyuru** (MEi-65), this last form may be a loan from Naukanski; Sir. *purʔu* (19, 104, 194); Nauk. *puyuru* (322, 326, 328), *puuru* (MEi-65) 'contrary to what one might have expected or wanted; on the other hand, however, but; instead; ironically'. CONJ, ADV-CLI.

Ch. *puur'u* 'instead of; in place of' (MO-101).

qayngun 'probably; evidently; indeed' (BAb-179; RUa-244; BO-54, 85; SLc-7; ME-31-35; not in MEi).

Ch. *qeyŋun* (MO-70); Koryak *qeyŋun* (ZHa-287); Alutor (Palanski dialect) *qa'iŋun* (BOe-871) 'it seems; probably'. ADV-CLI, or in second position.

qayngunllu 'probably; evidently; indeed' (BAb-179; not in RUa; NBK/5-61).

qayngunqun 'probably; evidently; I guess' (BAb-179; not in RUa; SLb-7; SEP-5).

qayngunwha (not in BAb; RUa-244).

qaywa (BAb-179; RUa-244; WA; MEc-219, 222, 235, 239, 270; MEi-65), **qayva** (VDa-62; MEc-321), but possibly a typo for the preceding: Sir. *qayva* (186); Nauk. *qayva* (319, 321, 332; MEi-65) 'wait!; consider before proceeding; true, yes; really?; at least', the precise range of meanings is unclear.

Ch. *qeywe* 'yes, indeed, truly, really' (MO-69; NOR-215; BOe-870, 875, 885; SKc-318, 331, 338, 346). ADV-CLI, often in a clause with the CSO mood, or a Participial mood (INP or TRP) (MEc-239).

qaywaam 'certainly; surely; it's OK' (BAb-180; RUa-245; WA; MEc-239; PU-17) (id.).

Ch. *qei'vE-m* 'indeed' (not in MO; BOe-870-71). ADV-CLI, INJ.

qaywalemnga 'or; then (following a condition)' (not in BAb; RUa-244; MEc-239). Composed of Ch. *qeywe* and Ch. *lɛmŋa*, *lɛmŋe* 'still, again' (MO-74), *lũ'mña* 'again', *a-lũ'mña* 'is that so?; only think of it! (surprise)' (BOe-854, 869, 888) (id.).

Nauk. *qaywallaməŋ* 'maybe' (310); this has probably the same etymology as the above form.

qaywalleqa 'now I see!; that's how it is!' (BAb-179; RUa-244-45; MEc-239; NBK/8-19, 30; SLd-27) (id.).

qaywaangam 'most certainly; that's enough; stop it' (BAb-180; RUa-245; MEc-239; NBK/8-7).

qaywanguq (not in BAb; not in RUa; SLc-101).

qaywaqun (not in BAb; RUa-244).

qelegi (SFE) 'it turns out; however; in the meantime' (not in BAb; RUa-289; MEi-65); Nauk. *kəłəgi* (310-11), a typo for *qəłəgi* (MEi-65).

Ch. *qəłəgi* 'but in fact' (MO-68; BOe-872; SKc-353).

qemak (BAb-181; RUa-290; WA; VDa-62; not in MEi), accepted by WON-pc; not known to TOO-, WAGa-pc; Sir. *qemagg* (188) 'almost the same size; approximately'.

Ch. *qəmek* 'a tiny bit; almost, all but, hardly' (MO-67; BOe-869; SKc-321, 360, 336); Koryak *qimək* 'almost' (BOe-880). ADV-CLI.

qemall (BAb-181; RUa-290; WA; RU-276; MEc-215; MEi-65; SLe-17; AN-19), **qemat** (TOO-pc), rejected by WON-pc; Sir. *qemall* (102); Nauk. *qəmel* (MEi-65) 'might happen, perhaps; finally; at last; after that, illogically, disappointingly', a strong adversative. ADV-VFR, other positions possible too.

Ch. *qəmel* 'but then, moreover' (MO-68; BOe-869).

Nauk. *qəmelam* (322, 326), *qəmelʔam* (MEi-65).

qemalngam 'consequently' (BAb-181; RUa-290).

qenwat (VDa-61; MEc-207, 219, 248, 270-71; MEi-65); Sir. *qenwat* (100), *qenwar* (103-4, 188); Nauk. *qənwat* (310-12, 321-22, 326; MEi-65) (JAc-2-3, 5, 7) 'finally, at last; as an understandable result of what has come before'.

Ch. *qənwer* 'finally, at last' (MO-68; SKc-331, 338, 353), 'at this moment, at this time; therefore' (BOe-872); Koryak *qin'vat* 'just' (ZHa-287). ADV-CLFR, positions very free in a clause; often, but not always, in clauses with a verb containing the Progressive Aspect postbase *-aqe-* (JAc-24, 54).

qenwatlu (BAb-13, 86, 182; RUa-292; SI-141; NBK/8-8, 9; AN-29, 35; SL-20; WY-47); Sir. *qenwatlu* (101) 'finally'.

qenwatlunguq (not in BAb; not in RUa; SLc-27; SLa-27).

qenwannguq (not in BAb; not in RUa; SLd-12, 15; SLc-2, 5; SL-15-16; SLb-2; SLa-6, 13, 21, 46).

qenwatqun (not in BAb; not in RUa; AN-43; APc-244).

qesiq 'but (?)', meaning not clear (not in BAb; not in RUa; TOO-pc; not in MEi), rejected by WON-pc.

Ch. *qəciq* 'as one wishes, as you want' (MO-69); maybe also related to Koryak *qecək*, *qecəkin* 'surely (indicating that a negative answer is expected)' (ZHa-287). ADV-CLI, INJ.

qesikqun (BAb-184; NBK/8-5; MEf-31), the pronunciation of TOO-, GOL-pc, *qesiqun* (BAb-184; RUa-295; MEc-219, 270; MEf-31; MEi-65), the pronunciation of WON-pc; rejected by TOO-pc; Nauk. *qesiqun* (MEi-65) 'it turns out, on the contrary, anyway', a relatively strong adversative, more common than *qesiq*. *qesiq* and *qesi(k)qun* are not known to WAGa-pc (id.).

Ch. *qəciqun* 'as you like it (?)'; no one knows' (MO-69; BOe-872).

qitik, **qituk** 'not until; if not for; until finally' (BAb-189; not in RUa; not in MEi), "slang" according to GOL-pc; TOO-, WAGa-, WON-, GOL-pc all rejected the variant *qitik*. Sir. *qitiw* (101), *qiti* (188) 'however'.

Ch. *qeteu* 'even now' (not in MO; BOe-873).

quun (SFE) 'you see; yes, you know' (not in BAb; RUa-282; MEc-247; not in MEi). As a separate particle, *quun* seems to exist only in CSY of the SFE and in Nauk. The related enclitic =*qun*, described in chapter 4, occurs in all CSY (BAb-312; MEc-270-71; MEi-65), in Nauk. (323, 329; MEi-65) and in Sir. (100, 102, 104).

In Chukchi, this form can be an enclitic as well as a separate particle (MO-66; MEc-270; BOe-873-75; SKc-337, 344); Koryak *qun* (ZHa-289; BOe-881); Alutor (Palanski dialect) *qun* (ZHc-126) 'well!; O.K.; all right; and so'. INJ.

Nauk. *qunam* 'even' (437).

Ch. *qu'num, qun-üm* '(emphatic)' (not in MO; BOe-873-74).

qunereng 'furthermore; moreover' (with the implication that the thing referred to is unsatisfactory or insufficient) (BAb-194; RUa-282; WA; not in MEi), according to GOL-pc, "slang"; known to WAGa-pc.

Ch. *qonərə* 'since, because' (MO-65; BOe-873; SKc-337). ADV-CLI, VI.

qunerem 'so that' (not in BAb; not in RUa; BO-85) (id.).

Ch. *qonərəm* 'since, because' (MO-65; BOe-873).

quunpeng (VDA-61; MEc-207, 213, 271; MEi-65); Sir. *qunpeng* (103, 188); Nauk. *qonpəng* (310, 312, 315, 317, 330; MEi-65); Imakl. *qotpək* (173) 'always, constantly'.

Ch. *qonpə, qonpəŋ* 'always; quite' (MO-64; SKc-312, 314-16, 352; BOe-872); Koryak *qo'npū* 'very, quite' (BOe-881), *qonpəŋ, qon'pəŋ* 'constantly, always' (ZH-675; ZHa-284, 290-91, 300-301, 303); Alutor (Palanski dialect) *qon'pəŋ* 'always' (ZHc-24). ADV-CLI, ADV-VI, other positions in the clause seem possible.

quunpeghllak (not in BAb; not in RUa; AN-20, 22; SL-1; SLa-11; IRR-22) (id.).

quunpengwaaghwaag 'always and always' (not in BAb; not in RUa; SLd-21) (id.).

quunperugllak 'forever, eternal' (BAb-195; RUa-282; SLd-37-38; WYb-52; WY-87, 131) (id.).

ratangaawen (not in BAb; RUa-436; WA) 'quite; that's enough; take care!'; **ratangaawen** (NBK/1-37) 'is that the way it turned out?' (not in MEi).

Ch. *ratangawŋen* 'enough' (MO-107; BOf; BOe-869).

repall (WA; VDa-62; MEc-242, 270; MEi-65); Sir. *repall* (104); Nauk. *rəpall* (319, 321; MEi-65) 'as a result of strong force; even, in fact, so much so that'.

Ch. *rəpet* 'even' (MO-120; BOe-855, 869; SKc-335-36). ADV-CLI, VI.

repallnguq (not in BAb; not in RUa; SLc-1; SL-8).

repalnguq (not in BAb; not in RUa; SLd-30).

repalqun (not in BAb; RUa-439; SLb-5).

rugell or **ruwell** (SFE) 'certainly, surely' (the only attestation is in WA-100; not in BAb; not in MEi).

Probably from Chukchi, but no correspondent has been found yet.

ruwellam 'it is better' (RUa-437)

ruwelqun 'possibly, maybe' (RUa-437).

ruweltun 'possibly, maybe' (RUa-437).

saama (BAb-204; RUa-474-75; VDa-62; MEc-230, 271; MEi-65; KAa-55; SLd-2); Sir. *sama* (104); Nauk. *sama* (322, 325; MEi-65); Imakl. *saama* (186) 'and, also, too; furthermore, moreover; already'.

Ch. *cama* 'also' (MO-142; BOe-867; SKc-339, 340-42); Koryak *cama* 'also' (ZHa-283, 291); Alutor (Palanski dialect) *cama* 'and; also' (ZHe-124-26). CONJ, differs from *ama* or *enkaam* in that it conjoins clauses only and not noun phrases. There is a correlative *saama...*, *saama...* 'and..., and...' (MEc-231).

saamallu 'and also' (not in BAb; RUa-474; APc-134, 137, 168).

siingen (BAb-213; RUa-447; MEc-270, 271; MEi-65), accepted by WON-pc; rejected by TOO-, GOL-pc; not known to WAGa-pc; Sir. *cingir* (100), *sinit* (100, 195), *singir* (195); Nauk. *seengat* (310), *singən* (MEi-65) 'still, but; nevertheless, oh well!; only; already; now that', range of meanings not clear.

Ch. *ceŋer, ceŋet* 'since, because' (MO-143; BOe-867). ADV-CLI, CONJ.

siingenllu 'still; nevertheless; only; already; if, since' (BAb-213; RUa-447; BO-81b; NBK/8-20-22; PU-21; SLe-20; OR-6; OT-5; SLa-3, 23), accepted by TOO-, WON-, GOL-pc; not known to WAGa-pc; more common than *siingen*, Sir. *cingillu* (100) (id.).

Sir. *cingirem* (100).

Ch. *ceŋer'əm, ceŋet'əm* 'since' (MO-143; BOe-897).

sitiwen 'with certainty, sure is!; as compensation' (BAb-214; RUa-448; WA; not in MEi); accepted by TOO-, GOL-pc; rejected by WON-pc.

Ch. *citewən* 'and later on, and now; it is good that...' (MO-145; BOe-867-68). This is a compound of Ch. *cit* 'formerly' and Ch. *ewən* (see under *iiwen*) (MO-145; BOe-848; SKc-329). ADV-CLI.

talwa (BAb-222; RUa-488; VDa-62; not in MEi); Sir. *talwa* (197) 'even yet, even; in addition'.

From the Ch. stem *tilv-* 'quite' (not in MO; BOe-815). ADV-CLFR, other positions in the clause seem possible; often in negative clauses, or with the CSO verb mood.

talwallu (not in BAb; RUa-488; PU-32; SLa-15).

talwanguq (not in BAb; not in RUa; T/53-43; SLe-23; WY-156; SLa-15).

tefaay, Sir. *tfay* (103) expression said at end of a story, like the sound of spitting, though this act need not accompany the expression. See *pefaay* and *pellaay* (not in MEi). INJ.

temngi (VDa-61; MEc-207, 271; MEi-65); Sir. *temngi* (100); Nauk. *təmgə* (311) *təmgə* (312; MEi-65); Imakl. *təmgə* (176) 'for no real reason, just like that, in vain; you should not have done it'.

From the Ch. prefix *təmje-* 'any', e.g., occurring in the verb *təmjewək* 'to lose; to get lost' (MO-134; BOe-816; SKc-329, 331-32, 364). ADV-CLI, INJ.

temngiraaghinaq 'completely in vain, for nothing' (not in BAb; RUa-515, 552; MEc-206; PU-6-7; OT-3) (id.).

uunmek 'including; and also' (BAb-248; RUa-547; not in MEi).

Ch. *unmək* 'greatly, strongly', *unməŋ* 'very' (MO-140; BOe-862, 888); Koryak *unmək* 'very, strongly' (ZHa-280).

upelen (SFE) (not in BAb; RUa-552; MEc-207, 271; MEi-65), **upelgen** according to TOO-pc, an *Ungazighmiit* word; rejected by WON-pc; Nauk. *opələn* (MEi-65) 'deliberately; this way, not the other way'.

Ch. *upəl'ən* 'motivated, driven by something' (MO-140).

upupeng (BAb-249; RUa-552; VDa-61; MEc-207-8, 271; MEd-125-26; MEi-65), *opopo*, apparently a phonologically unassimilated loanword (BO-53, 81b); Sir. *upupeng* (104); Nauk. *opopəŋ* (310, 312, 319; MEi-65); Imakl. *opopək* (175-76, 182-83), *opopəŋ* (174) 'might as well; better'.

Ch. *opopəŋ* (MO-96), *opopə* (SKc-315, 350; BOe-862; WRa-355) 'let's, let me' (exhortative).

uramra 'waking (while not asleep)' (not in BAb; RUa-552; not in MEi). Possibly, CSY **urarma** '(interjection expressing great astonishment)' (not in BAb; not in RUa; MEc-266; not in MEi) is related to through metathesis.

Probably contains Ch. *o'ra* 'openly' (not in MO; BOe-862).

urang 'very much' (BAb-251; SI-55; not in RUa; NBK/7-52; NBK/8-passim; Caleb Pungowiyi, personal communication; TOO-pc; AN-3, 4, 47; SLa-39, 45; IRR-8; not in MEi).

Ch. *o'raŋ* [ʔoraŋ] 'openly' (MO-97; BOe-862; SKc-314, 317, 330, 334); Koryak *oyarŋ* 'openly' (ZHa-282); Alutor (Palanski dialect) *oraŋ* 'openly' (ZHc-279). ADV-VI.

Sir. **walcaghh, whalcaghh** 'again; even' (102, 181).

Probably related to Ch. *welciin* 'it makes no difference; all right, very well' (MO-27), *velē'in, vetē'in* 'for my part granted!' (BOe-863).

walenka (SFE) 'thank you' (not in BAb; not in RUa; not in MEi), accepted by TOO-pc; rejected by WON-pc.

walenkequn (RUa-562; RU-42; VDa-62; MEc-219, 225, 270),
walenkaqun 'thank you' (BAb-257, TOO-, WON-pc), 'it's alright, fine' (GOL-pc), acknowledged by all informants as a Siberian word, "never used" (GOL-pc); I am not sure this apparent difference in pronunciation between the SFE and SLI is real, since it is very hard to differentiate between /a/ and /ə/ before /q/; Sir. *walinkekun* (181) 'thank you' (id.).

Ch. *welənkəqun* 'thank you' (MO-27); does not seem to exist in Chukchi without the element -*qun*, and the same might be true for the CSY word.

walenqwekqun 'at least' (BAb-257; not in RUa; not in MEi), rejected by TOO-, WON-pc.

waniwan 'not at all, not even' (not in BAb; not in RUa; not in MEi), not known to WAGa-pc.

Ch. *wanewan* 'not at all' (MO-20; BOe-852, 882; SKc-318, 336-37, 344); 'rather than' (PN-247). The resemblance to CAY *waniwa, wanigga* 'here it is!' (JAb-410) is coincidental. ADV-CLI.

waniwanllu 'not at all' (BAb-257; RUa-563), more common than *waniwan*.

waniwanngam 'not at all' (BAb-257; not in RUa; NBK/8-42).

wanlegi (BAb-257; JA-85, 90; SL-23; NBK/1-30; RUa-563-64; VDa-61; MEc-233, 249, 270; MEi-64); Sir. *wanlegi* (181), *whanlegi* (181); Nauk. *waanlegi* (JACa-1-2), *weenlagi* (310, 318-19, 321-22, 326-28; MEi-64) 'more than ever, more and more, furthermore; still, yet'.

Ch. *wenl̥agi* 'unexpectedly; still, meanwhile; notwithstanding' (MO-27-28; BOe-853, 863; SKc-318, 336). ADV-CLI, often following a clause with a verb in the CSO mood.

wanlegingam 'and yet all the more' (BAb-257; RUa-564).

waran (BAb-257-58; RUa-72, 564; MEc-229, 270-71; PU-21, 23, 29; SLe-7; IRR-0; MEi-64); Sir. *warall* (102, 181); Nauk. *waran* (319-21), *warat* (MEi-64) 'at least; really?; I can't believe it; although'.

Ch. *weler* 'at least (limited qualification of action)' (not in MO; MEI-129; BOe-863-64; SKc-336), Koryak (Kamenski dialect) *va'lan* (BOe-863). ADV-CLFR, other positions seem possible; often with commands.

waranngam 'though, though at least' (not in BAb; RUa-565; MEc-229, 271; BO-81b).

warannguq (not in BAb; not in RUa; OT-13-14).

waranqun 'at least, even if, if only' (not in BAb; RUa-564-65; OT-9; BAa-83; SLa-4).

Ch. *welerqun* 'at least (with a shade of anger)' (RU-42; MEi-73; BOe-864).

Sir. *waralqunem* (101-2).

waranqunwha (not in BAb; not in RUa), according to TOO-pc, a possible variant for *waranwhaqun* (see below).

waranwha (not in BAb; RUa-565; RU-42; OT-9).

waranwhaqun (not in BAb; not in RUa; TOO-, WON-pc).

Nauk. *waratam* 'if only, provided that' (320).

Ch. *welerəm* 'at least' (not in MO; BOe-863-64; SKc-336).

Nauk. *waratuq* (310).

wasag (BAb-258; RUa-177, 565; MEc-248, 270; not in MEi); Sir. *wasaghh* (104); Nauk. *wasag* (322, 326, 328; MEi-64) 'as I told you, you see?; however, but, on the other hand'.

Ch. *wacaq* 'but then; in spite of' (MO-21; SKc-313, 342-43, 350). ADV-CLI.

wasi 'as it turns out; he/she/they will do it again!' (BAb-258; not in RUa; not in MEi), "like *wasiwa*, but less strong", according to GOL-pc *wasi* and *wasiwa* can be used when referring to some apparently persistent pattern of behavior that is new and unusual.

wasiin 'thus' (meaning unclear) (not in BAb; RUa-565; KRA-50; MEc-215, 229, 237; MEi-64; SLa-34).

Possibly from Ch. *wetcin* 'vainly; for nothing' (MO-28).

wasiinngam (not in BAb; not in RUa; TOO-, WON-pc).

wasiwa 'as usual; I think it's going to happen again' (BAb-56, 258; RUa-565; SLd-22; SLe-18; SL-18), more common than *wasi* (id.).

wasiwaam (not in BAb; RUa-565) (id.).

wata (not in MEi); Sir. *wata* (100); Nauk. *wata* (310, 313) 'more; furthermore'.

Ch. *wetā* 'really, truly, very; at once; continually' (MO-29; BOc-843, 863-64; SKc-338, 345; CO-230); Koryak *woto* 'here it is' (ZHa-289, 291). INJ, ADV-VI.

wataghllak 'much more; be sure and act' (BAb-258; RUa-566; SLd-17; PU-8; SLe-26-27; AN-15; SL-25; APc-244; SLa-6), with commands (id.).

watangam 'make sure!' (not in BAb; not in RUa; WAG-pc).

watanguq (not in BAb; not in RUa; OT-8; AN-58; SL-23).

Nauk. *watapik* (311, 313; MEi-64); Imakl. *watavik* (177) 'for sure; necessary'.

wataqaaghaq 'a little more, even more' (BAb-258; RUa-566; BA-30; SLe-17; WYb-27, 47; WY-30, 89; HEN-10, 12; NBK/5a-20, 51, 54, 55; SLa-20) (id.).

wataqaaq 'a little more, even more' (not in BAb; not in RUa; PU-5) (id.).

Sir. *wataqun* 'without fail; at once' (100, 181).

Ch. *wetəqun* 'at once' (MO-29; BOe-863); Koryak *wotoqun* 'here it is' (ZHa-290).

watatuq (not in BAb; not in RUa; OT-4; AN-54).

watawata (not in BAb; RUa-566) (id.).

weni (BAb-258; RUa-567; MEc-265; not in MEi); Sir. *weni* (102-3, 181); Nauk. *wuni* (310, 313) 'come on; go ahead; better do; well!, now!', expression used to encourage action lest the opportunity be lost, but according to GOL-pc 'no!'.
 Ch. *wəne* (MO-24-25; NE-198; SKc-317-18, 335, 359), gu'n'a (BOe-885, 887) 'well now, come on; sure; indeed, yes; and'. INJ, ADV-CLF, other positions also seem possible.

weni-i (AN-36).

weningam 'it is time!' (not in BAb; RUa-567); rejected by TOO-, WON-pc.

weninguq 'on no account, in no case' (not in BAb; RUa-567; NBK/5a-55; SLe-10; SLb-12; SEP-8).

weninguq 'not in the least' (BAb-259; not in RUa), rejected by TOO-, WAGa-, WON-pc; possibly a typo for *weninguq*.

weniqruk 'I should say not!' (BAb-259), 'for no reason at all' (RUa-567; MEc-206), according to GOL-pc "slang, is expressing it ugly"; not known to WAGa-pc (id.).

Sir. *weniqun* 'all right' (101).

Ch. *wānequn* '(expresses sympathy)' (not in MO; SKc-361).

wetku (MEc-229, 235, 238, 270; MEi-64); Sir. *wetku* (103); Nauk. *wətku* (MEi-64) 'not until, only when, then'.

Ch. *wə'tku* 'for the first time; only just, just then' (MO-26; BOe-846, 867; SKc-319, 330, 339, 342, 345, 347-48, 351); Koryak *witku* 'only when' (ZH-678; ZHa-284); Alutor (Palanski dialect) *vitku* 'only when' (ZHc-125-26). CONJ, often in a clause with the CDO or CQO mood, also with the CIO mood (MEc-245); often renders 'when' in translations from English (HEN-passim).

wetkullu 'and until' (not in BAb; not in RUa; APc-140).

wetkuqun (not in BAb; not in RUa; WY-56; WYb-16, 19, 42).

wetkuqunnguq (not in BAb; not in RUa; T/53-35).

wiin (BAb-259; RUa-566; VDa-61; MEc-266, 270; MEi-64); Sir. *win* (104, 181); Nauk. *wiyin* (319) 'not yet; not now; I'm waiting till later'.

Ch. *wiin* (MO-21; SKc-321), *wəyin* (RU-101), *vien*, *vijen* (BOe-864) 'just, simply'; Koryak *wyin* (ZHa-291), *wəyin* (ZHa-297) 'you see; really, truly, indeed'. ADV-CLI, VI, other orders also seem possible.

wiinqun 'wait and see; not yet' (BAb-260; SI-61; NBK/8-passim; RUa-567-68). INJ.

wiintaku (BAb-260; RUa-566), *wiintakun* (BAb-260; not in RUa); Sir. *wintaku* (181) 'not yet; wait' (id.). INJ.

wiisam (SFE) (not in BAb; not in RUa; MEc-270; MEi-64), rejected by TOO-, WON-pc; Sir. *wacem* (101, 181); Nauk. *weesam* (310-12; MEi-64) 'probably, perhaps'.

Ch. *wec'am* 'obviously, very likely; probably, maybe' (MO-29; SKc-320). There is evidence that this is not an assimilated loan in CSY, considering the Soviet spellings for CSY *wesam* (MEc-219), *weesam* (MEc-312) where <e>, <ee> are [e], [e:].

yataang (BAb-262; RUa-591; WA; not in MEi), not known to WAGa-pc; Nauk. *yetang* (407) 'ready; prepared; equipped'.

Ch. *yet'a, yet'ay* 'in readiness' (MO-38; WRA-356; BOe-843).

Modifies verbs in a construction discussed in subsection 6.6.1.

yataangwaaq (not in BAb; RUa-591; SLc-32) (id.).

yaywa 'as usual; understandably; as expected' (BAb-262; not in RUa; not in MEi; not in MO); SLI only, according to GOL-pc, 'a slang word, hardly used'; not known to WAGa-pc.

Probably a variant of the word below.

yaywaaseng (not in BAb; RUa-588; WA; VDa-61; MEc-207, 271; MEi-64; SLa-3), *yaywasen* (MEd-129), probably a typo; Sir. *yaywaceng* (104); Nauk. *yaywasang* (310, 312; MEi-64) 'happily, safely', according to TOO-pc, the same as *yaywa*. ADV-VI.

Probably related to Ch. *yaywaceta* 'pitifully, mournfully' (MO-162).

yaywaasengiighaq (not in BAb; not in RUa; MEc-206) (id.).

yeghlegi (BAb-262; SI-35; BA-22; PU-19; SLa-27; MEc-219, 233, 270; MV-237; MEi-65), **yaghlegi** (BAb-261; RUa-587; not in MEi; SLa-20); Sir. *yeghlegi, yeglegi* (103, 184) 'instead, the other way around; contrary to expectation, contrary to what should have been done'.

Ch. *y'elagi* (MO-47), *ye^εli'i* (BOe-862) 'rather, instead'. ADV-CLI.

yeghlegillu (not in BAB; not in RUa; PU-26, 29), *yaghlegillu* (BAB-261; RUa-587; WA; NBK/ø-50, 52-53; NBK/4-67) '(alas) no!, on the contrary, but no!'. INJ, ADV-CLI.

yaghlegisu '(same as *yaghlegillu*)' (not in BAB; not in RUa); TOO-*pc* insisted this exists; it was rejected by WON-*pc* (id.).

yaghlegiwan (not in BAB; RUa-588) (id.).

yeghleginguq (not in BAB; not in RUa; SLε-4; SLa-2).

yeghrat (BAB-262; SI-46, 61; NBK/3-40; SLa-5, 10, 24; RU-254; MV-49; MEi-65), **yaghrat** (not in BAB; RUa-588; VDa-62; not in MEi); Nauk. *yāghrat* (MEi-65) 'too, much too much; couldn't be; particularly'.

Ch. *y'arat* 'very, highly, too much' (MO-47; SKc-311, 316, 334), *ya'rat* 'very' (BOe-860-62), 'truly' (JAK-610). ADV-CLI, VFR.

yaghraghlagpenani 'not very strongly' (RUa-588) (id., with negative APO mood inflection).

yeghratwha (not in BAB; not in RUa; SLa-75).

yeqay 'let's do it, let it happen, come on' (BAB-263; RUa-187; VDa-62; MEc-250, 266, 270; MEi-65); Sir. *yeqay* (102, 184); Nauk. *yāqay* (309, 319, 321; MEi-65), *yakaiya* 'fine, good' (JEN-134).

Ch. *yāqqey* 'really, surely, better'; gives a slightly emphatic shade to the phrase, like German *ja* (MO-48; BOe-861-62); probably related to Ch. *qeywe*, (see under *qaywa*). INJ, ADV-CLI.

Nauk. *yeqayam* (335).

yeqayngan 'not again' (BAB-263; RUa-187), not known to WAGa-*pc*, Nauk. *yāqayngan* (MEi-74); a strong negative (id.). ADV-CLI.

yeqaynganllu (not in BAb; not in RUa; SLa-11).

yeqayngannguq (not in BAb; not in RUa; OT-6; AN-56).

yeqayqun (not in BAb; RUa-187).

Koryak (Kamenski dialect) *y'aqqai'-qun*, (Parenski dialect) *y'aqqai'-qun*
'then' (BOe-878).

yeqastuq (MEc-250), *yeqaytuq* (not in BAb; RUa-187).

There seem to be two particles in Chukotan languages that were borrowed in the other direction, i.e., from Eskimo into Chukotan.

Alutor *atunəm* 'together; possibly (?)' (VDA-61).

CSY *atunem* (BAb-46; RUa-102; MEc-208), *atunum* (VDA-61); Sir. *atinaghh* (100, 180) 'together'; CAY *atunem* 'matching, mutually, complementary, conforming to'; probably related to the Canadian Inuit particle *atunit* 'each of us, you, or them; everywhere; generally; everyone in the same way' (SC-43).

Ch. *kita*, *kit'am* 'now then; come on!' (MO-52); Ch. *kita* is identifiable as a loanword since vowel harmony does not apply. There is probably no relationship to Ch. *kite* 'seldom' (BOe-870).

CAY *kitak*, *kitaki*, *kitek* 'well then; please' (exclamation used with the OPT mood) (JAb-208); not found in CSY. INJ.

Ch. *kitaqun* 'let's' (MO-52; SKc-337); Sir. *kitaqun* 'let's' (102); not found in CSY.

6.4. Nonparticle Loanwords from CSY in Chukchi

The borrowing apparently went in the opposite direction with the following Chukchi words, given with their CSY origin and some cognates outside Siberia. Of course, the possibility of a very remote genetic relationship cannot be excluded. The CSY forms are valid for both SLI and the SFE, unless otherwise noted; most of the

loans below are also cited by Bogoraz (1949:184) and Vdovin (1961). The lexical influence of CSY on Chukchi is mainly cultural since most of the loans refer to the technical terminology of fishing, marine-mammal or bird hunting, and preparing.

Ch. **Aywan, Aywanal'on**, pl. *Aywanal'ot* (MO-10), also in Koryak, Alutor *yevan* 'Eskimo' (VDa-40), probably a typo for *eyvan*. As seen under Ch. *eygəsqən*, this contains a Proto-Eskimo stem. Ch. *Ayguat'kokótsetlen* 'Polar Star' (NOR-224), not in MO, not in VDa, contains the same stem.

Ch. **cikəl**, pl. *civlet, ciglet* (MO-144), Alutor *siklanaj* (VDa-40, 45) 'special stick used for training reindeer'; CSY *siklagh-* 'pick, pickaxe'; CAY *ciklaq* (JAB-118).

Ch. **epləqətet** 'bolas' (NOR-213; BOg-184; VDa-44; MO-157); CSY *avleqaghtagh-* 'bolas' (JAA-56; RUa-17), *avleqaghte-* 'to use a bolas on' (BAB-48; RUa-17), *avlegh-* 'with legs spread' (BAB-48), *aghveqaghtagh-* 'to hunt with a bolas', *aghveqaghtaate-* 'bolas'⁶ (BAB-17; not in RUa); CAY *avler-* 'with legs spread' (JAB-95).

Ch. **eygəsqən** 'north' (MO-152); Alutor *aygəsqə* 'north' (VDa-40); CSY *aywaa-* 'north', CSY *aygugh-* 'north, to go north'; Canadian Inuit *aggur-* 'to go against the wind' (SC-2), Proto-Eskimo **adgur-* 'to go against the wind or current' (Michael Fortescue, personal communication).

Ch. **Eywələt** 'SLI Eskimos', my spelling of *eiwhue* 'lit (HU-276-77), probably related to Ch. *Aywan*, q.v.

Ch. **kaltəkal, kaltən**, pl. *kaltət* (MO-51; RU-266; VDa-44); Alutor *kaltən* (VDa-40) 'bottom (e.g. of a dish or vessel)'; CSY *qaltagh-* 'bucket, pail'; Nauk. *qaltaghwaq* (MEe-429); CAY *qaltaq, qaltauq* (JAB-308), *qantaq* 'plate, bowl, dish' (JAB-313); Alaskan Inupiaq *qattaq* 'water barrel' (MC-47).

Ch. **kemgəkem**, pl. *kemget* 'reindeer with white hair on the hind legs, with the appearance of stockings' (MO-60), *keməget* 'man's sealskin boot' (VDa-44);

⁶ These last two forms are unetymological. They might have been contaminated by *aghveqe-* 'to harpoon a whale'.

CSY *kameg-* '(skin) boot'; cognates in all Eskimo languages, e.g. Inuit *kamik* 'footwear, boot' (WE-294-97; FOb).

Ch. **kupren** 'net, seine' (MO-54); not found in Koryak (ZH); CSY *kuuvragh-* 'seal net; to set a seal net'; Sir. *kuvran* 'seal net' (MEb-185); Nauk. *kuvraq* 'net for sea mammals' (MEe-422); CAY *kuvyaq, kuvya, kuvsaq* 'fishnet' (JAb-215); Kodiak Alutiiq *kugyaq* 'gill net' (LE-80); North Slope Alaskan Inupiaq *kuvraq* 'fishnet, to catch with a fishnet' (MC-24); Netsilik Inuit *kubviait* 'fish nets' (TH-102).

Ch. **maka**, pl. *makat* 'shorts' (MO-76); also in Koryak (VDa-59); CSY *maka-* 'sheet of moss used as diaper in child's overalls; diaper'; Nauk. *makaq* (MEe-441); CAY *makaq* 'diaper' (JAb-222).

Ch. **menemen**, pl. *menet* 'bait' (MO-81; VDa-45); CSY *managh-* 'lure, bait'; CAY *manaq* 'fishing lure with a hook' (JAb-225).

Ch. **măcumăc**, pl. *măcut* 'plant juice' (MO-80; VDa-45); CSY *mesugh-* 'liquid, juice'; CAY *mecuq* 'liquid part of something; sap; juice; green or waterlogged wood' (JAb-231).

Ch. **pel'uten** (MO-105); Alutor *paluqtan* 'beaver' (VDa-40); also in Koryak (VDa-45); CSY *palughtagh-* 'sea otter (?)' (BAb-147; not in RUa); CAY *paluqtaq** 'beaver' (JAb-278).

Ch. **potoragərgən, puturelən** '(woman's) dance'; *puturek* 'to dance (of women)' (MO-100, 101; BOg-184); CSY *putulqagh-* 'to dance a jig-like dance (?)'; CAY, Yukon dialect, *putu* 'women's welcome dance' (JAb-299); Coronation Gulf (Copper) Inuit *putuyauta* 'its dance-song (in songs)' (JEN-102).

Ch. **puureq, pureq** 'beluga' (MO-101; BOg-184; IN-77); CSY *puugzagh-*; Sir. *puugraghh* (MEb-194); Nauk. *pugyaq* (MEe-24); CAY *puge-* 'to come to the surface, emerging halfway' (JAb-297).

Ch. **qelungij** 'dipnet' (MO-70; VDa-44); CSY *qalu-*; CAY *qalu* 'dipnet' (JAb-309); Eastern Canadian Inuit *qalu-* 'to use a dipper' (SC-265).

Ch. **qeyutekicgøn** 'meat that is low in nutritional value' (MO-72; VDa-45); CSY *qayu-* 'tea, broth'; cognates in all Eskimo languages (FOb).

Ch. **tutlik** 'plover, sandpiper' (MO-132; MV-48); CSY *turiig-* 'American golden plover'; Sir. *tuligg, turigg* (MEb-198, 210); Nauk. *turiik* (MEe-485); CAY *tusiik, tuyiik*; CAY (HBC dialect) *tuliik* (JAb-380); Imakl. *turik* (MEg-307); Alaskan Inupiaq *tuutlik* (Kobuk dialect), *tuullik* (FOb).

Ch. **t'eyut'ey** 'salt; salt water of the sea' (MO-133; BOg-184; VDa-40); Ch. *t'ertəy* 'salt' (IN-77); Alutor *tagyutaq* 'seawater' (VDa-40); CSY *taghyugh-* 'salt; ocean; sea'; CAY *taryuq* 'salt, brine'; Eastern Canadian Inuit *tariuq* 'sea; salt' (SC-355).

Ch. **vuvcelken** 'lemming' (EM-92; not in MO); CSY of SLI *puvelt-*, *vuvelt-* 'an animal of some sort variously described as a frog, rodent, or flounder' (BAb-166); CSY of SFE *vuvelt-* 'lemming' (RUa-125); Sir. *puvelleggh* (MEb-209), *puvellegg* (EM-92) 'lemming'; CAY *puveltuk* 'red-backed vole'; CAY (NUN dialect) *pugultu* 'lemming' (JAb-297, 301).

The following words are said to be borrowings from CSY into Chukchi by Bogoraz (1949:184). Since no other source gives them and since the spellings are not always reliable, I am not certain that they are borrowings, and if they are, of the direction of borrowing; the resemblances do not seem due to chance, however:

Ch. *ceŋəl* 'box' (MO-143), CSY *salngak* 'box; suitcase; motor well in boat; coffin' (BAb-204; RUa-473); Ch. *kuwáyik*, CSY *kuwej* 'child's food' (not in MO; BAb; or RUa; spellings according to BOg-184); Ch. *tikétik* 'male of small species of seal' (not in MO; spelling according to BOg-184), CSY *tegag-* 'smelly male bearded seal in rut' (BAb-226; not in RUa), also in CAY, Yukon, and NUN dialects (JAb-365).

As for the Chukchi to Eskimo loans, the following words are considered to be CSY loanwords in Chukchi or Alutor by Vdovin (1961). The resemblances, either phonological, semantic, or both, are so small that they must be due to chance, and full references are not given. However, one can never completely exclude the possibility of a very remote genetic relationship.

Ch. *apayŋən* (Northeastern dialect), CSY *apa-* 'grandfather'; Ch. *ate*, CSY *ata-* 'father'; Ch. *iktən* 'piece of ice, icicle', CSY *iknegh-* 'clod, lump'; Ch. *kanayolgən*, CSY *kayu-* 'sculpin, bullhead'; Ch. *kelikel* 'book', Alutor *kaləkal*, CSY *aqaleghyag-* 'motley, many-colored'; Ch. *kenciq*, CSY *kagsagute-*, *kaksagute-* 'whip'; Ch. *kavetə* 'comfortably', CSY *qavaghvig-* 'bed'; Ch. *kilkil*, CSY *qalqasig-* 'navel; belly button; umbilical cord'; Alutor *kivək* 'to sleep in open air', CSY *akivigte-* 'to prop up a skin boat on its side'; 'to spend the night under a boat'; Alutor *kumatkok* 'to prepare food', CSY *kumagh-* 'to be on fire, to be lit'; Ch. *ləmləm* 'spare, superfluous', CSY *limtaagh-* 'something stored away for the future'; Ch. *magnə* 'heap, warehouse', CSY *mayughnegh-* 'heap, pile, side of boat'; Ch. *məkəcən* 'numerous', but 'small' according to VDa-60, CSY *mekestaaghhagh** 'small thing'; Ch. *nutenut* 'land, country', CSY *nuna-* 'land; village; place; ground; floor'; Ch. *ŋoyŋowləŋən* 'strand of wool, hair', CSY *nuyagh-* 'hair'; Ch. *pottəŋalgən* 'holes cut through walrus meat for hauling it; holes cut around the edge of a walrus hide, in order to stretch it for drying' (BOc-446; BOg-184); related to Ch. *pottək* 'to treat or dress leather' (MO-100), rather than to CSY *putu-* 'hole made on the edge of a skin for running rope through it to stretch and dry it', Nauk. *putu* 'buttonhole' (MEe-468), and CAY *putu-* 'to make a hole through, to pierce' (JAb-299); Alutor *samasam* 'island in the sea', CSY *samani* 'in that place'; Ch. *uluw* 'covered with earth', CSY *llivegh-* 'grave'; Ch. *uwokic* 'husband', according to RU-290; not in MO; CSY *ugi-* 'husband', Ch. *yegət*, CSY *ighu-* 'foot'; Ch. *yekuygən* 'handle', CSY *iquyagh-* 'little piece of ivory between the harpoon point and the shaft, which is fastened to that shaft'.

6.5. The Extent of Chukchi Borrowing into CSY

6.5.1. The Theoretical Importance of Borrowings from Chukchi

Thomason and Kaufman (1988:35) in a work thoroughly exploring, from the point of view of historical linguistics, the relationships between language contact, creolization, and genetic linguistics point out that it is the sociolinguistic history of the speakers of a language, rather than the structure of the language, that is the primary determinant of the linguistic result of language contact. Structural factors are only secondary in importance. This idea is of course not original, but it has not always been popular. This is so because many linguists were afraid that if one accepts external constraints on a theory of contact-induced language change as more important than internal ones, one has to abandon the presuppositions of the comparative method and the goals of genetic reconstruction. There is indeed a methodological requirement of the comparative method that the possibility of

interference be ignored, but it is a misconception to turn this requirement into a theoretical principle. Thomason and Kaufman (1988:3, 13) point out that, whereas there are indeed mixed languages that should not be classified genetically at all, most languages are not mixed and that the comparative method applies on all these and can therefore be maintained.

The CSY-Chukchi situation is an interesting testing ground for the principle that sociolinguistic constraints are more important than linguistic constraints. Indeed, proponents of linguistic constraints would assume that Eskimo, with its very tightly knit polysynthetic structure, is relatively impervious to linguistic interference. Actually, the morphological and syntactic systems of Eskimo are much more highly interrelated than in Indo-European languages or other more analytic languages even when they are easily distinguishable on the surface. Thus, describing Eskimo in terms of morphology and syntax is rather unrevealing, since so much of what is syntax in analytic languages takes place in the morphology. The "internal syntax" of Eskimo has more connections with the "external syntax" of separate words than is often believed, as shown in chapter 1, subsection 1.6.3.5, and in the remainder of this chapter.

Syntactic borrowing, and particle borrowing in particular, has never fascinated linguists as much as the influence of morphological systems upon one another. This is because morphological systems are seen as more tightly knit than syntactic systems, and therefore any influence on them is considered remarkable (*Actes du Sixième Congrès International des Linguistes* 1949:31-40, 303-48, 497-514; Bréal 1892:191-92; Derooy 1956:73-87; Hill and Hill 1986:194-97; Oinas 1958:271-74; Sapir 1921:201-6; Sommerfelt 1926; Thomason 1980; Thomason and Kaufman 1988:14-20; Weinreich 1968:29-34, 41-44).

Assuming that particles are an integral, although peripheral, part of the Eskimo syntactic system, one has reason to believe that the question whether the "external" syntax influenced the morphology (or "internal syntax") of the language will be just as interesting as the matter of the influence of two morphological systems on each other in more analytic languages. I examine the syntactic and morphological consequences of the particles borrowed into CSY in section 6.6, and draw theoretical conclusions in section 6.7.

6.5.2. Possible Explanations for Chukchi Borrowing into CSY

Thomason and Kaufman present a detailed classification of the existing types of contact-induced language change. They distinguish three types (these types also exist in mixtures): contact-induced language change in language maintenance, contact-

induced language change in language shift, and pidginization (1988:50). Under language maintenance, they discuss borrowing, defined as the incorporation of foreign features into a language by native speakers of that language (p. 37). Furthermore, they point out that the kinds of borrowing can be arranged in a scale, ranging from (1) Casual contact: lexical borrowing only, through intermediary points, to (5) Very strong cultural pressure: heavy structural borrowing (pp. 74-76). Taking into account the amount of Chukchi borrowing in CSY described in the preceding sections, it appears that the CSY/Chukchi situation needs to be classified under point 2 of this scale, characterized as follows by Thomason and Kaufman:

(Point 2): Slightly more intense contact: slight structural borrowing.

Lexicon:

Function words: conjunctions and various adverbial particles.

Structure:

Minor phonological, syntactic, and lexical semantic features. Phonological borrowing here is likely to be confined to the appearance of new phonemes with new phones, but only in loanwords. Syntactic features borrowed at this stage will probably be restricted to new functions (or functional restrictions) and new orderings that cause little or no typological disruption.

Superficially at least, point 2 is indeed an accurate picture of Chukchi-influenced CSY. One can contrast it with point 1 of the scale, called Casual contact: lexical borrowing only, where only content words can be borrowed, and point 3 of the scale, called More intense contact: slightly more structural borrowing, where derivational affixes are added to native vocabulary and where personal and demonstrative pronouns and lower numerals are also borrowed. These phenomena did not occur in CSY.

From a sociolinguistic point of view, Thomason and Kaufman's framework thus posits that the presence of particular patterns of borrowing in CSY is linked to the intensity of contact between Chukchi and CSY.

From a typological point of view, the Chukchi borrowings apparently cause little disruption, as predicted under point 2 above. If for now we assume the thesis, examined in detail in section 6.6, that there actually is a relationship between the large

number of borrowed particles and the reduced postbase morphology of CSY, two scenarios are possible. It could be that CSY had, for some reason, reduced its postbase morphology, and then borrowed particles in order to make up for this loss. It could also be that CSY first borrowed the particles, and subsequently reduced the part of its postbase morphology that was synonymous with these particles for reasons of economy.

There are several reasons to prefer the second scenario. By comparison with linguistic evolution elsewhere, it appears that an initial borrowing of particles is much more common. Particles, in particular sentence adverbs, interjections, and conjunctions, are easy to borrow since they do not call for a basic reorganization of the syntax of the language. Indeed, such particles stay mainly at the periphery of the clause, either at the beginning or at the end of it. We have seen in the syntactic remarks in subsection 6.3.1 that it is largely the case that Chukchi particles occur either at the beginning or at the end of the clause. As for the first scenario, assuming an initial reduction of the postbases would be much harder to explain since morphological systems tend to be more stable than the syntax, in particular the syntax at the periphery of the clause.

Particles at the periphery of the clause, and in particular conjunctions, have been borrowed in many languages, and even when no influence of another language is present, they are often replaced (Meillet 1926:159-74). Conjunctions and particles of Indo-European or Semitic languages are often borrowed in language families with very divergent syntactic structures.

Many Spanish adverbs and coordinating and subordinating conjunctions, including *como* 'like', *entonces* 'then', *hasta* 'until', *o* 'or', *para* 'for, in order to', *pero* 'but', *porque* 'because', *pues* 'well', *y* 'and', and *ya* 'already', have been taken over by Mesoamerican languages. Examples from a variety of Mesoamerican languages belonging to several families are given in Suarez (1983:136). Additional examples can be given for Huastec (Mayan) (Thomason and Kaufman 1988:80), for Ocuiltec (Otomanguean) (Muntzel 1985:518), and for Nahuatl dialects (Uto-Aztecan): Beller and Beller (1979:209-10, 296) for Huasteca Nahuatl; Brockway (1979:147) for North Puebla Nahuatl; L. Campbell (1987:255-58) for Pipil; Hill and Hill (1986:177-94), for Malinche Nahuatl; Law (1961:559), for Isthmus Nahuatl; Sischo (1979:316, 359, 366-70) for Michoacan Nahuatl; and Tuggy (1979:13, 130, 133-36) for Tetelcingo Nahuatl.

Conjunctions and particles of Baltic or Germanic origin occur in Finnish (Collinder 1957:95, 98, 101, 103, 107, 126), and particles of Germanic origin occur in Lappish (Collinder 1957:217, 219, 222). Particles and conjunctions from Russian are common in the Uralic languages of the Soviet Union. Examples in Collinder

(1957) are given for Kamassian (p. 509), Mordvin (pp. 243-44), Ostyak (p. 355), Vogul (p. 342), Votyak (p. 292), and Ziryene (pp. 309, 311, 314, 317). The borrowing of Indo-European conjunctions in Uralic seems to be taken as a matter of course by specialists in the history of these languages, and very little discussion of it is provided in the literature (Collinder 1965).

The Persian conjunction *ke* 'that' has been borrowed as *ki* to introduce subordinate clauses in several Altaic languages, such as Azerbaijani (Comrie 1981:84-85), Turkish (Lewis 1953:122-23), and Uzbek (Menges 1945:192-93).

As far as Semitic is concerned, the Arabic conjunction *wa* 'and' has been borrowed in Turkish as *ve* (Comrie 1981:48).

Furthermore, closely related languages with similar syntactic structures can also borrow particles and conjunctions, in particular for stylistic reasons. So, in a variety of affected English, the French adverb *très* 'very', can be used at the periphery of a phrase. In Parisian French slang, the conjunction *because* is sometimes used instead of the French equivalent *parce que*.

Even though it is apparent that particles can be borrowed into CSY without disrupting the structure of the language as a whole, it is still necessary to clarify why the borrowing of particles has taken place to the extent that it did, since type 2 on the borrowing scale certainly does not suggest a language that can borrow a disproportionately high number of particles relative to the number of borrowed content words. Obviously, there is more than the prediction indicated by Thomason and Kaufman's type 2 involved here.

The only way to explain CSY's richness in particles is in external historical terms. We have seen in chapter 5 that there is fragmentary historical and linguistic evidence pointing to the existence of a Chukchi-CSY trade jargon in the nineteenth century on the Chukotka coast. Presumably, some varieties of such a jargon were Eskimo-based, i.e., the majority of the lexicon was from Eskimo. In such a jargon, it would of course be in the interest of CSY speakers to make use of as many Chukchi loanwords as possible in order to maximize intelligibility with the jargon of native Chukchi speakers. The extensive use of Chukchi synonyms for Eskimo words is documented in the presumably jargon word lists examined in chapter 5, section 5.3. But of course one cannot be sure that these word lists are good representatives of the jargon as opposed to the real Eskimo, since in the mind of the native Eskimo speaker the opposition between a language system and a jargon system had no reality. Instead, the difference has a sociolinguistic reality only; there must have been a graded continuum of the *usages* of the Eskimo language, with "pure" Eskimo as spoken to other Eskimo on one end of the continuum and pidginized Eskimo as spoken to the Chukchi on the other end. The language of the word lists probably

represents the Eskimo usage as spoken with foreigners with an interest in recording the language, and is probably located somewhere between the ends of the continuum, but certainly closer to the pidgin end than to the "pure" Eskimo end.

In this social and economic situation, it is possible that, under the influence of the jargon end of the continuum, Chukchi loanwords came to be used in Eskimo, at least to some extent. Apparently, the particles from Chukchi represented the invariant superstructure of the jargon, into which speakers of CSY, as well as of the other Eskimo languages of the SFE, could insert lexical items from their own languages, and, conversely, the particle superstructure came to be used in the Eskimo languages themselves.

This stable superstructure would account for the remarkable fact that even though the three Eskimo languages of the SFE (i.e., CSY, Naukanski, and Sireniki) are mutually unintelligible, all three acquired virtually the same Chukchi particle corpus long after diverging from one another (see subsection 6.3.1).

After the decrease of economic dependence of the Eskimo on the Chukchi (see chapter 5, section 5.1), the jargon forms of Eskimo ceased to have a sociolinguistic function and died out. With their disappearance, one would also expect the disappearance of Chukchi loans in Eskimo itself, except for those Chukchi words that would be useful in Eskimo even outside the context of relationships with the Chukchi. As a matter of fact, Chukchi nouns and verbs that persisted in CSY are not very numerous and mostly refer to cultural items for which there is no readily available word in Eskimo (see subsection 6.2.1.1). Thus, it is possible to assume that the redundant Chukchi loanwords in Eskimo disappeared with the jargon varieties. However, this was certainly not the case with the Chukchi particle superstructure, which remained in Eskimo, even though many particles are synonymous with native derivational morphology.

There is no evidence whatsoever of the diagnostic features of pidginization or creolization, such as *reduction* and *simplification* (Mühlhäusler 1986:4, 135), in modern CSY. There is, however, some sociolinguistic and internal linguistic evidence that particles might have been borrowed into CSY through a jargon rather than directly from Chukchi.

From a sociolinguistic point of view, it is interesting that some SLI native speakers have negative reactions toward some of the particles from Chukchi. One consultant in his sixties commented that some of the rare particles are "slang" (see GOL-pc in subsection 6.3.1), and therefore not very good Yupik. He was not aware, however, of a Chukchi origin of these words. Such a negative reaction is common among native speakers with respect to a variety of their own language they consider inferior, in particular a pidginized or creolized variety (Mühlhäusler 1986:23-27) or a

nonstandard dialect. Speakers of one language can of course also have negative feelings about words borrowed from another language into their own, but this is clearly not the case here, since the "slang" words are not recognized as foreign in any way.

From a more internal linguistic point of view, there is also some evidence for remnants of situations typical of jargons in CSY. Not only are there a surprisingly large number of particles from Chukchi in CSY but also many of these particles are largely synonymous with one another. As shown in the definitions in the list in subsection 6.3.1, the subtle semantic and pragmatic differences between various particles might not necessarily go back to the time when they were borrowed from the Eskimo jargon, since the meaning of these particles is often slightly different from the original meaning of the Chukchi particle. Originally, i.e., in the semantically crude Eskimo jargon, the choice between one or another synonymous particle and a native Eskimo means of expressing the same thing must have been a matter of free choice even more than it is now. Examples of such near-synonyms are the additive conjunctions *ama*, *amen*, *enkaam*, *legan*, and *saama*; the adversative conjunctions and particles *enraq*, *iwernga*, *naqam*, *puuru*, *wasaq*, and *yeghlegi*; the conjunctions *iiwen* and *wetku*, indicating sequentiality; the particles *agnepa*, *enekiitek*, *entaqun*, *gaymaangi*, *langetaq*, *luuraq*, *miiwen*, *qemall*, *qayngun*, and *wiisam*, indicating doubt or conjecture; and the intensifying particles *allameng*, *elngaatal*, *repall*, *urang*, *wanlegi*, *wata*, and *yeghrat* (see list in subsection 6.3.1). This somewhat artificial situation is typical of trade jargons. While it is true that a more or less stable pidgin has a small vocabulary with little synonymy, this need not be the case for a reduced language in the jargon stage (Mühlhäusler 1986:144, 169). In the jargon stage, the more synonyms a speaker uses, the more he is likely to be understood by the interlocutor. In order to maintain basic communication, this exaggerated redundancy is more important than conciseness. The proliferation of particles in modern CSY can be considered a relic of this situation.

Actually, this free variation between various synonymous elements is particularly apparent in the variety of SFE CSY as described in Menovshchikov (1962, 1967), based on fieldwork carried out approximately in 1954 through 1967. It would appear that a more recent tendency toward reduction of this amount of variety is taking place in CSY, a process that could be described in terms of depidginization (Mühlhäusler 1986:237-38). This form of depidginization has been taking place, independently in the SFE and on SLI, but with increasingly divergent results.

In the SFE, the Chukchi construction with a particle and a reduced amount of postbases is generally favored, as a result of relatively recent policies of intermarriage and integration with the numerically superior Chukchi. According to Menovshchikov

(1986:70-72, 75), this process of replacement of Eskimo postbases by corresponding Chukchi particles is more advanced in Naukanski than in CSY. Of note: on SLI, which is now severed from Chukchi influence, the original constructions with postbases are more often used, and the less common particles are said to be "Siberian only" and "never used anymore" (see also section 6.3). The more common particles are fully integrated into the language, however. Examples of variation between postbases and particles as described by Menovshchikov (1967), as well as examples of the more recent patterns prevailing in the SFE and on SLI, are in section 6.6 below.

There are also in CSY some cases of morphological and lexical convergence. Convergence occurs in an attempt to match meaning and phonetics of a Chukchi word with an Eskimo form that happens to be somewhat similar semantically and phonetically. Such somewhat desperate attempts to bridge the gap between two unrelated languages are more often found in pidgins and creoles than in other types of languages (Gumperz and Wilson 1971; Mühlhäusler 1986:2, 144) and are additional evidence for a jargon origin of the CSY particle vocabulary from Chukchi.

Cases of convergence must of course be carefully distinguished from borrowings. One can only talk of convergence if there is an etymologically original form in both languages. Furthermore, chance resemblances and cases of remote genetic relationships are always difficult to distinguish from cases of convergence. Convergence should only be assumed when the semantic and phonetic parallelisms are striking in some way in comparison to the source languages.

A striking example of convergence in the only well-documented Eskimo jargon, the Inupiaq-based trade language of Hershell Island is *mī-lūk* 'milk'. The typical result is that the Eskimo believes it is an Eskimo word (Inupiaq: *miluk* 'nipple of breast, breast' [MacLean 1980:27]), whereas the English-speaking trader is just as convinced it is the English word 'milk' (Stefánsson 1909:227).

In CSY, the most convincing examples concern the particles *ama* and *allameng*. (Full Chukchi and Siberian Eskimo etymologies were given in subsection 6.2.3.) It is clear that CSY *allameng* 'more, some more, again' is presently interpretable as the Modalis case of CSY *alla* 'other thing; different thing'; however, I believe it is likely that the meaning of the particle was influenced by the Chukchi particle *lāmŋe* 'still', *lāmŋa* 'again', or *alāmŋa* 'is that so?; only think of it! (surprise)'. Further evidence is provided by the fact that *allameng* is related to the second element in CSY *qaywalemnga*, Nauk. *qaywallaməŋ*, and CSY *naqamallameng*, Nauk. *naqallaməŋ*. CSY *ama* (Sir. *ama*, Nauk. *ama*, *amə*) 'and; also' could be from the CSY demonstrative particle *ama* 'over there, on the other side' (Greenlandic cognate *aamma* 'moreover' [Fortescue 1984:122, 124-25]), but it is certainly influenced by Chukchi *amə*, *aməŋ* 'also, even, furthermore', related to Koryak *amə*, *aməŋ* 'also'.

The three following examples are less convincing, and could be borrowings (either from Eskimo into Chukotan or from Chukotan into Eskimo) or, more plausibly, chance resemblances:

CSY *aamta* 'as we know from our experience; as we well understand', is from Chukchi *amto* 'well?, what news?; and how is it?', possibly influenced by a CSY equivalent of CAY *amta-llu* 'nevertheless, however, but' (Jacobson 1984:64).

CSY *aatak, aataw* 'do it anyway; give it a try; come on; I'll try, let's' (used to boost one's own, or somebody else's morale) is from Chukchi *a'taw* [ʔataw] 'without purpose; for no particular reason; it does not matter; in vain', possibly influenced by a CSY equivalent of CAY *ataki, atak, ata, ata'a* 'let me see!, well then' (exclamation often used with optatives) (Jacobson 1984:87).

CSY =Vy, a vocative and exclamatory enclitic, was possibly influenced by a CSY equivalent of CAY =i, used with demonstrative adverb bases to form exclamations which operate as "verbal pointers" and with some other words with special meanings (Jacobson 1984:621-22). Chukchi -y is a vocative, especially used with proper names. It is remarkable that the CSY enclitic covers both the original CAY and Chukchi usages, since it can be used with demonstrative adverb bases as well as with nouns (see examples in chapter 5, subsection 5.2.1).

6.6. Morphological and Syntactic Consequences of Particle Borrowing

6.6.1. Types of Morphological and Syntactic Influence

It is a valid hypothesis that the existence of particles borrowed into CSY is the cause of the somewhat smaller number of productive verbal postbases in CSY, as compared to other Eskimo languages. It is also possible that other systems of CSY, such as the verbal moods and the enclitics, might have been affected or reduced by particle borrowing.

One case of borrowing of a syntactic structure from Chukchi has been found. The particle *yataang* 'ready; prepared; equipped', from Ch. *yet'aŋ* 'in readiness', appears to be used in CSY in a construction calqued on Chukchi. In Chukchi, the adverbial particle *yet'aŋ* can be used in a type of syntactic construction with the auxiliary verbs *n'ełək* 'to become' or *ɾətcək* 'to make someone or something into

something' (Moll and Inénlikéj 1957:38; Worth 1963:356; Bogoras 1922:843), resulting in the phrases

- | | | |
|-----|----------------|--------------------------|
| (9) | yet'arj n'elək | 'to prepare oneself' |
| | yet'arj rətcək | 'to prepare (something)' |

Such constructions have perfect equivalents in CSY. *yataang* can be followed by the semantically almost empty verbs *ayuqe-* 'to be in a certain way; to resemble; to be like' (Badten et al. 1987:52) or *pi-* 'to do, to act', forming the idiomatic constructions *yataang ayuqe-* 'to be ready' and *yataang pi-* 'to prepare'. Use of the CSY particle *yataang* is not frequent, especially on SLI, and the examples below are all I have found. As shown in example 13, it appears that a noun can appear between the two parts of the construction; I don't know whether this is also possible in the corresponding Chukchi construction.

- (10) *yataang ayuqunga*
yataang ayuqe-unga
 ready be.like-IND(1s)
 'I am ready' (BAB-262)
- (11) *allaghhiinaghmi yakughnami ellnga yataang ayuquq qimalleghqamun*
alla-ghhagh-(ng)inagh*-mi yakugh-nagh-mi ell-(ng)a yataang ayuqe-uq*
qimag-llegh-kagh-mun
 different-little.N-only.N-LCs dangerous-situation.of.Root-LCs PN-AB(3s)
 ready be.like-IND(3s) run.away-act.of.V-ing-raw.material.for.N-TMs
 'in any dangerous situation, he is ready to run away' (RUa-591)
- (12) *tamaghhaghmi unangniighem sanqutanga yataangwaaq ayuquq*
tamaghhagh-mi unange-niigh-m sanquta-(ng)a yataang-(ngw/w)waagh-*
ayuqe-uq
 all-IR(3Rs-s) hunt-one.who.V's.habitually-RLs equipment-AB(3s-s) ready-
 completely be.like-IND(3s)
 'all the hunters' gear is ready' (RUa-591)

- (13) Taawanguq yataang qimugsiq ayuqeftuq, taghnughhitelwaaghufuqlu, (...) taghnughhitek yataangwaaq ayuqelghiik.
 taawa=nguq yataang qimugsigh-Ø ayuqe-fte-uq taghnughhite-leg-
 (ngw/w)aagh-(ng)u-fte-uq=lu taghnughhite-k yataang-(ngw/w)aagh-
 ayuqe-lghiik
 there(D:R)-it.is.said ready dogteam-ABs be.like-apparently.V-IND(3s)
 tent-one.with.N-completely.N-be.N-apparently.V-IND(3s)-also sled.tent-
 ABd ready-completely be.like-INP(3d)
 'There a dog team appeared to be ready, it even had a sled tent (for mother and children) (...) the sled tent [inherently dual] was completely prepared.'
 (SLc-32)
- (14) Ayvelgunghani tawaten sanquteteng quunpeng yataang piiqelghiit
 pillgunallghani sikum.
 ayvegh-lgu-negh-(ng)ani tawa-ten sanqute-teng quunpeng yataang pi-aqe-
 lghiit pillgunagh-llegh-(ng)ani siku-m
 walrus-have.N-act.of.V-ing-LC(3s-s) there(DA:R)-EQ equipment-AB(3Rp-
 s) always ready do-PROG-INP(3p) act.skillfully-act.of.V-ing-LC(3s-s)
 ice-RLs
 'When they sighted a walrus they would always quickly prepare their harpoon before going on the ice.' (APc-128)

The adoption of this construction into CSY was definitely facilitated by the existence in CSY of constructions of a verb in the APO mood with *ayuqe-* and *pi-* (Bogoras [1901]:53). Like *yataang*, these verbs in the APO mood function like adverbial modifiers, but at the same time carry most of the semantic load of the construction. Examples are

- (15) qaayngi neviighluteng ayuqeftut.
 qaye-(ng)i nevughiigh-luteng ayuqe-fte-ut
 top-AB(3s-p) put.sod-APO(3p) be.like-apparently.V-IND(3p)
 'it appears they put sod on top of it (that's the way it was)' (NBK/8-62)
- (16) unangniighnaluni piiquq
 unange-niigh-na-luni pi-aqe-uq
 hunt-V.habitually-in.order.to.V-APO(3s) do-PROG-IND(3s)
 'he wanted to do some hunting' (HEN-21)

In the only other occurrence of *yataang* in my corpus, this particle occurs after the verb *kiyaghute-* 'to keep; to provide for'; it is not clear whether this construction should be analysed like the constructions of *yataang* with *ayuqe-* or *pi-*.

- (17) *mughunniightem quunpeng suflugani kiyaghutaqaa yataang*
mughute-niigh-(s)te-m quunpeng suflugagh-ni kiyaghute-aqe-aa yataang
 hunt.on.ice-habitually.V-one.who.V's-RLs always gun-AB(3Rs-s) keep-
 PROG-IND(3s-3s) ready
 'the hunter always keeps his gun in readiness' (RUa-591)

Two CSY enclitics, *=qun* (see subsection 6.3.1) and *=Vy* (see section 6.5) are of Chukchi origin. The only influence they seem to have on the remainder of the enclitic system of CSY is that finer pragmatic distinctions can be made. In particular, the CSY pair *=qun* and *=ngam* seem to divide a pragmatic area that is covered by only one postbase in other Eskimo languages. For example, CAY has *=ggem* (cognate with *=ngam*), but with the combined meanings of CSY *=ngam* and *=qun*.

The numerous idiomatic combinations of particles and enclitics occurring in CSY might also be partly due to Chukchi influence, since many of these combinations also exist in Chukchi; it is probably not a coincidence that in the majority of idiomatic particle and enclitic combinations, the enclitic involved is *=qun*. Presumably the tendency to form idiomatic combinations with enclitics is more typical of Chukotan than of Eskimo, and by analogy the pattern might then have spread to include combinations of particles with some originally Eskimo enclitics such as *=ngam* and *=llu*.

As far as the influence of particles on the inflectional verb-mood system is concerned, no evidence of reduction was found. Actually, CSY has a verb-mood system as rich as that of any other Yupik language. There are, however, tendencies for certain particles to occur with certain moods, which are modeled on the tendencies of certain native Eskimo particles to occur with the same types of restrictions. Such tendencies have been indicated in the list in subsection 6.3.1, under the syntactic information. These tendencies seem to be semantically conditioned, and, with two exceptions, never amount to mutual conditioning. The only cases of obligatory co-occurrences I could find involve the particle *iki* 'do not yet', always occurring with the negative APO mood and expressing a warning or mild prohibition (18), and the particle *isigima* 'I thought that...', always occurring with a verb in a Participial (INP or TRP) mood (19-21):

- (18) Iki aghulaqegpenang, qikmighten atuqaqit.
 iki aghulaqe-gpe-nang qikmigh-ten atuqe-aqe-iit
 not.yet leave-NEG-APO(2s) dog-AB(2s-p) use-PROG-IND(3p-3p)
 'Don't leave yet, they are still using your dogs.' (MEc-252)
- (19) Isigima estugaghsimalghiiten.
 isigima estugagh*-te-(i/u)ma-lghiiten
 I.thought store-go.to.N-PST-INP(2s)
 'I thought you went to the store.' (GOL-pc)
- (20) Isigima estugaghmellegelghiiten.
 isigima estugagh*-mi-et'e-lleqe-lghiiten
 I.thought store-LCs-be.at.N-FUT-INP(2s)
 'I thought you would be at the store.' (GOL-pc)
- (21) Sangam tagimangisin? Isigima tagisqesaqemken!
 sa-(ng)an tagi-(i/u)mangit^oe-zin isigima tagi-sqe-yagh-kemken
 do-CQO(3s) come-PST.NEG-INT(2s) I.thought come-ask.to.V-V.in.vain-
 TRP(1s-2s)
 'Why didn't you come? I thought I had asked you to come!' (RUa-174)

6.6.2. The Relationship between Enclitics and Particles

In this subsection, one enclitic of Eskimo origin, *=llu*, is compared to two particles of Chukchi origin, *ama* and *enkaam*.

In CSY of the SFE as described by Menovshchikov, the enclitic *=llu* 'and' and the particle *ama* 'and' can freely co-occur when conjoining noun phrases (22), but it is also possible to have just *ama* or just *...=llu ...=llu*.

- (22) Yatallu ama Ipallu igaghaqut Ugrelegmi.
 Yata-Ø=llu ama Ipa-Ø=llu igagh-aqe-ut Ugreleg-mi
 Yata-ABs-also and Ipa-ABs-also go.to.school-PROG-IND(3p) Urelik-
 LCs
 'Yata and Ipa are studying in Urelik.' (MEc-230)

On SLI, a more stable situation seems to have developed. *ama* is most often used for conjoining clauses or verbs (23) rather than noun phrases, but there is a

tendency to use *ama* for long noun phrases (24). When it conjoins noun phrases, ...=*llu* ...=*llu* occurs more often than *ama* (25); it is also possible to use the enclitics *and* *ama*, but this does not occur frequently (26).

- (23) Ipapestaaq John iqallugtekaaguq ama neghesugnitkaqaa.
 ipa-pestaaq- John-Ø iqallug-te-kau-guq ama neghe-sugnit^oe-kaqe-aa
 true-truly.N John-ABs fish-catch.N-PST-IND(3s) and eat-seem.to.V-PST-
 IND(3s-3s)
 'It is certain that John caught a fish, and it is possible that he ate it too.'
 (NBK/10-18)
- (24) kuugghem avaqutaa, ama nayagem avaqutaa
 kugegh-m avaqutagh-(ng)a, ama nayag-m avaqutagh-(ng)a
 brother-RLs child-AB(3s-s) and sister-RLs child-AB(3s-s)
 'child of a brother, and child of a sister' (a dictionary definition of *ilughagh*-
 'cousin') (SI-62)
- (25) Anglilleqlu ayemruugtelleqlu.
 angli-llegh-Ø=llu ayemruugte-llegh-Ø=llu
 grow-act.of.V-ABs-also exercise-act.of.V-ABs-also
 'Growth and exercise.' (title of a children's reading booklet edited by Myra
 Poage)
- (26) Piitesiighatlu ama piitutetlu.
 piitesiighagh-t=llu ama piitute-t=llu
 plant-ABp-also and seed-ABp-also
 'Plants and seeds.' (title of a children's reading booklet edited by Myra
 Poage)

Both *ama* and *=llu* (when occurring only once, see chapter 4, subsection 4.2.1) can be used as modifiers meaning 'also'. With this meaning, *ama* and *=llu* seem to be very much equivalent (27 and 28). In most cases of co-occurrences of *=llu* and *ama*, there is only one enclitic, so the interpretation of *=llu* must be 'also' rather than 'and'. When both *ama* and *=llu* are used in this way, particular emphasis, translatable as 'and also', is intended (29).

- (27) Ama, service-naluni piiquq.
ama, service-na-luni pi-aqe-uq
and hold.a.service-in.order.to.V-APO(3s) do-PROG-IND(3s)
'Yes, he wants to hold a church service also.' (HEN-9)
- (28) Whangallu pikengyugaqunga.
whanga-Ø=llu pikenge-yug-aqe-unga
PN1-ABs-also get-want.to.V-PROG-IND(1s)
'I'd like to get one too.' (HEN-19)
- (29) Nunaaghmi qaayghut eglumun kumaaqutkaqegkangit ama eslamillu.
nunaagh-mi qaayghu-t eglug-mun kumaaqe-(u)tke-aqe-kangit ama esla-
mi=llu
camp.LCs tree.bark-ABp stove-TMs start.a.fire-V.on.account.of-PROG-
TRP(3p-3p) and outdoors-LCs-also
'They used to start a fire with dried-up tree bark for stoves in camps and also outdoors.' (SI-134)

With the same meaning as in 29, =llu can also occur on *ama* itself:

- (30) Laluramketimeng linnaqsalghiinga, amallu piyaqnapigtuq.
Laluramke-ti-meng linnaqe-yalghiinga, ama=llu piyaqnagh-pigte-uq
white person-speak.the language.of-MDs learn-IPO(1s) and-also
be difficult-very.V-IND(3s)
'When I was learning English it was also very difficult.' (HEN-16)

In CSY of the SFE, as described by Menovshchikov, the enclitics =llu 'and' and the particle *enkaam* 'then; and' can also freely co-occur when conjoining noun phrases:

- (31) (a) Nunivagmi kiyaghtaqt teghigatlu, qawaagetlu.
(b) Nunivagmi kiyaghtaqt teghigat enkaam qawaaget.
(c) Nunivagmi kiyaghtaqt teghigatlu enkaam qawaagetlu.
nunivag-mi kiyaghte-aqe-ut teghigagh-t=llu enkaam qawaag-t=llu
tundra-LCs live-PROG-IND(3p) game.animal-ABp-also then bird-ABp-
also
'On the tundra live wild animals and birds.' (MEc-228)

The three ways illustrated in (31) coexist in the SFE, and the use of one rather than the other appears to be a matter of individual style (Menovshchikov 1967:228). This was probably the situation when Menovshchikov carried out fieldwork with CSY in the fifties and sixties. However, in Soviet radio recordings from the early seventies, it would seem that *=llu* is rarely used, if at all, and that it is always replaceable by *enkaam*, even for conjoining noun phrases. This contrasts sharply with the situation on SLI, where *enkaam* is used for clauses only and never for conjoining noun phrases:

- (32) Puufqaghlluni ayuqeftuq una, enkaam clinic-mun aglaataa.
 puuve-qaghte-luni ayuqe-fte-uq u-na-Ø enkaam clinic-mun aglagh-(u)te-aa
 swell-suddenly.V-APO(3s) be.like-apparently.V-IND(3s) here(D:R)-na-
 ABs then (English)-TMs go.home-V.with-IND(3s-3s)
 'It (his leg) was so swollen, so they took him to the clinic.' (HEN-23)
- (33) Awalighiinkut neqmeng enkaam qayumeng akitaput.
 awaligh-iinkut neqe-meng enkaam qayugh-meng akite-aput
 bring.food-IND(3p-1p) meat-MDs then hot.drink-MDs reciprocate-
 IND(1p-3p)
 'They brought us some meat so we gave them tea in exchange.' (SI-21)

It is possible to have *enkaam*, *ama*, and *=llu* in the same sentence, as in 34, which also contains the etymologically Eskimo particle *allanqik* 'additionally':

- (34) Ayveghaghluteng enkaam ama allanqik nanughaghlutengllu!
 ayvegh-agh-luteng enkaam ama allanqik nanugh-agh-luteng=llu
 walrus-catch.N-APO(3p) then and additionally polar.bear-catch.N-
 APO(3p)-also
 'They had caught a walrus and additionally a polar bear!' (BAB-28)

In conclusion, the influence of particles on Eskimo enclitics must be considered slight, since there are a lot more contexts of free variation than cases of mutual exclusiveness, and there are no cases of obligatory co-occurrences. However, in present-day CSY, there appears to be some specialization of the usages of the three elements discussed above, which is probably a reduction of an earlier stage of more widespread redundancy. It is particularly interesting that this specialization tends to favor the particles in the SFE and the enclitic on SLI.

6.6.3. The Relationship between Postbase Morphology and Particles

As far as the influence of particles on postbases is concerned, the results of my research are fragmentary because of the large number of possibilities of influence and the large number of elements and constructions to be compared. I used two complementary methods of finding significant relationships between particles and postbases. A "positive" way to explore them consists in looking at restrictions between postbases, on the one hand, and particles, on the other. A "negative" way consists in comparing, from a semantic point of view, CSY postbases with postbases from another Eskimo language that has not borrowed from Chukchi. One can then see whether CSY does or does not have any particular semantic groupings of postbases that are well represented as borrowed particles. The "positive" method is used first.

In CSY of the SFE, as described by Menovshchikov, the NN postbase *-nku/-nkuk* 'N and partner/N and partners' can freely co-occur with the particle *enkaam* 'and' in conjoining noun phrases. This postbase is used only when the relationship between the noun phrases is comitative, i.e., when they both refer to animate beings:

- (35) (a) *Kavitankuk Muminkuk kayiiquk esnami.*
Kavita-nku-k Mumi-nku-k kayi-aqe-uk esna-mi.
Kavita-N.and.partner-ABd Mumi-N.and.partner-ABd cook.seal.blubber-
PROG-IND(3d) shore-LCs
- (b) *Kavita enkaam Mumi kayiiquk esnami.*
Kavita-Ø enkaam Mumi-Ø kayi-aqe-uk esna-mi
Kavita-ABs then Mumi-ABs cook.seal.blubber-PROG-IND(3d) shore-
LCs
- (c) *Kavitankuk enkaam Muminkuk kayiiquk esnami.*
 'Kavita and Mumi cook seal blubber (in order to make it render fat) on the shore.' (MEc-229; MEi-66)

As stated in subsection 6.6.2, *enkaam* cannot conjoin noun phrases in the SLI variant of CSY, so only the first option is available there:

- (36) yuggaankuk mayeraaghpagenkuk
 yug-ghhagh*-nku-k mayeraagh-pag-nku-k
 person-little-N.and.partner-ABd giant-large.N-N.and.partner-ABd
 'the little man and the giant' (BAb-219)

Incidentally, the presence of both the enclitic =llu (see chapter 4, subsection 4.2.1, and subsection 6.6.2, above) and the postbase -nkut/-nkuk would imply the meaning 'the group of N and the group of N', as in:

- (37) Angqangankutlu Yapankutlu qepghayaamaat esnamun.
 Angqanga-nku-t=llu Yapa-nku-t=llu qepghagh-yagh-(i/u)ma-ut esna-mun
 Angqanga-N.and.partner-ABp-also Yapa-N.and.partner-ABp-also work-
 go.and.V-PST-IND(3p) shore-TMs
 'Angqanga's group and Yapa's group were going to work on the shore.'
 (MEc-256)

I have no information on whether noun phrases containing three types of conjoining elements, i.e., the particles *enkaam* or *ama*, the postbase -nkuk/-nkut, and the enclitic =llu, are possible. The resulting sequences would be as in 38, but are not found in my data:

- (38) *N-nkutlu ama N-nkutlu
 *N-nkutlu enkaam N-nkutlu

When the relationship is instrumental with one noun phrase and comitative with the other noun phrase, the postbase -tuumagh- (with the Independent Relative case [IR]) is used, with or without *ama* (39); possibly *enkaam* could replace *ama* in CSY of the SFE.

- (39) (a) John tagiiq ilatuumaghmi, car-etuumaghmi.
 (b) John tagiiq ilatuumaghmi, ama car-etuumaghmi.
 John-Ø tagi-uq ila-tuumagh-mi, ama car-tuumagh-mi
 John-ABs come-IND(3s) friend-with.N-RL(3Rs-s) and (English)-with.N-
 RL(3Rs-s)
 'John came with his friend and with a car.' (NBK/10-36)

Menovshchikov also gives other examples of apparently free variation between postbase and particle or a combination of postbase and particle in the SFE (40, 41, 43,

45). The examples below contain the particles *leganiitek* (40) and *temngi* (41) 'in vain, for nothing' and the postbase *-pigesnagh-* with the same meaning as the particles:

- (40) (a) *igapigesnaamalghiinga*
 (b) *leganiitek igaaamalghiinga*
 (c) *leganiitek igapigesnaamalghiinga*
leganiitek igagh-pigesnagh-(i/u)ma-lghiinga
in.vain write-V.in.vain-PST-IND(1s)
 'I wrote in vain.' (MEc-209)
- (41) (a) *Tagipigesnaataquq.*
 (b) *Temngi tagiitaquq.*
 (c) *Temngi tagipigesnaataquq.*
temngi tagi-pigesnagh-(u)te-aqe-uq
in.vain come-V.in.vain-V.for-PROG-IND(3s)
 'He comes in vain.' (MEi-70)

But, unlike CSY of the SFE, the Naukanski language has only one way to express 'for nothing', and has to do it with a particle since it does not have a postbase with this meaning:

- (42) *Təmnga kaasutaquq.*
təmnga kaasutə-aqə-uq
in.vain come-PROG-IND(3s)
 'He comes in vain.' (MEi-70)

In CSY of the SFE there is also variation between the particle *wataghllak* and the postbase *-pestaagh-*, both meaning 'truly, for sure':

- (43) (a) *Tagipestaaghllequq.*
 (b) *Wataghllak tagillequq.*
 (c) *Wataghllak tagipestaaghllequq.*
wata-ghllag- tagi-pestaagh-lleqe-uq
more-large.N come-truly.V-FUT-IND(3s)
 'He will come for sure.' (MEi-70)

Again, the Naukanski language has only one way to express 'for sure', and has to use a particle *watapik*, related to CSY *wataghllak* (Menovshchikov 1986:70):

- (44) *Watapik kaasullutuq.*
wata-pig- kaasutə-lutə-uq
 more-very.N come-FUT-IND(3s)
 'He will come for sure.' (MEi-71)

Finally, in CSY of the SFE there is also variation between the particle *qelegi* and the postbase *-fte-*, both meaning 'it turns out':

- (45) (a) *Igaghta aqnighaqeftuq.*
 (b) *Qelegi igaghta aqnighaquq.*
 (c) *Qelegi igaghta aqnighaqeftuq.*
qelegi igagh-(s)te-Ø aqnigh-aqe-fte-uq
 it.turns.out write-habitual.V-er-ABs be.sick-PROG-evidently.V-IND(3s)
 'It turns out that the teacher is sick.' (MEi-70)

Again, the Naukanski language can express this meaning with a particle only, since it does not have a semantically corresponding postbase:

- (46) *Qələgii uwini tuqlughaa.*
qələgii uwi-ni tuqlugh-aa
 it.turns.out husband-AB(3Rs-s) call-IND(3s-3s)
 'It turns out that she called her husband.' (MEi-70)

Menovshchikov thus concludes that there are three means of expressing identical meanings available to CSY, and he calls them *analytic* (or lexical), *synthetic* (or suffixal), and a combination of the first two. He does note, however, that there is a tendency to use either the analytic or the synthetic means (Menovshchikov 1967:209, 216, 229, 1986:70-71). Menovshchikov (1986:71) also concludes that the influence of Chukchi is more advanced in Naukanski than in CSY. Given that the Naukanski area is more completely surrounded by communities of Chukchi speakers than CSY is, it can be expected to have undergone a more drastic Chukchi influence than CSY (see also chapter 5, section 5.1). Thus, in Naukanski, the loans from Chukchi became more stable than in CSY, resulting in the total loss of the originally Eskimo postbases with the same meaning. The process of postbase loss is apparently still ongoing, since certain existing Naukanski postbases are becoming increasingly

rare. For example, *-vreegh-* 'again, once more' is being replaced by the synonymous etymologically Eskimo particle *tanem*, and the postbase *-tagh-* 'at last' is being replaced by the synonymous Chukchi loan *qanwat* (Menovshchikov 1986:72). In the case of *tanem*, one will note that this particle is not a loan from Chukchi. So there is a possibility that, at least in Naukanski, postbases are disappearing under the pressure of particles in general, rather than Chukchi particles in particular. Certainly, such a pattern would have to be initiated by Chukchi particles, and then extended to other particles by some form of analogy. I do not think a similar pattern exists in CSY. For example, the CSY particle *tanem* 'once again' can freely co-occur with the postbase *-laatagh-* 'to V one more time', and there is no evidence that *-laatagh-* is becoming increasingly infrequent. On the contrary, as noted in Badten et al. (1987:223, 279), the particle and the postbase often occur together (47 and 48):

- (47) Qikmiq tanem iteghlaataamalghii siqlughatun.
 qikmigh-Ø tanem itegh-laatagh-(i/u)ma-lghii siqlughagh-tun
 dog-ABS once again enter-V.one more time-PST-INP(3s) meat.cellar-EQs
 'The dog got into the cellar again.' (MEc-208)
- (48) tanem aliighlaataghaa
 tanem aliigh-laatagh-aa
 once again clear up-V.one more time-IND(3s-3s)
 'once again it has cleared up' (BAb-223)

Menovshchikov points out that there might be differences in expressivity between synonymous Chukchi particles and postbases. He discusses this point in such impressionistic terms as "additional emotional-modal meanings" or "enhancing the emotional-expressive reception by the speaker" (Menovshchikov 1986:74-75). During my own fieldwork, I have found that it was generally difficult to get consultants to discuss the meaning of particles, and even more so to obtain comparisons with apparently synonymous postbases, so I am not in a position to blame Menovshchikov for his lack of precision on this point. I believe the differences in expressivity could be viewed in psychological terms. Indeed, every CSY speaker recognizes what is a separate Eskimo word, but never recognizes morphemes that are not words in isolation. Clearly, particles are separate words, whereas postbases are not words, and thus native speakers are not conscious of them at all. Actually, a native speaker is able to recognize postbases as isolatable elements only after a considerable amount of linguistic training. Thus, the particles could be

considered more "expressive" than postbases in that they add a conscious element to the sentence.

For example, the conjunction *inquin* 'in order that' often occurs in the same clause as the postbases *-sqe-* 'to tell to V' (Menovshchikov 1967:230, 236, 238; Menovshchikov and Vakhtin 1983:238) (see example 49) or *-na-* 'in order to V' (with the APO mood) (Rubtsova 1971:167). *Inquin* is not obligatory, since the postbases already express the purposive meaning, so it can only be justified by the psychological need for a separate word as discussed above.

- (49) (a) Qikmighhaq qalghighaquq, aastesqelluni.
 (b) Qikmighhaq qalghighaquq, *inquin* aastesqelluni.
 qikmigh-ghhagh*-Ø qalghigh-aqe-uq *inquin* aane-(te)ste-sqe-luni
 dog-little-ABs whine-PROG-IND(3s) in.order.that go.out-CAUS-tell.to.V-
 APO(3s)
 'The puppy is whining, so that somebody will let it out.' (MEc-238)

Many particles can also function both as adverbial modifiers and as independent interjections, as seen in the list in subsection 6.3.1. Menovshchikov points out that these interjections can replace whole predicates, a function that postbases cannot have since they must be bound. The following Naukanski utterance consists entirely of interjections from Chukchi, and functions as a predicate. It can definitely be considered more expressive than a full sentence:

- (50) ata ənraq ataw!
 go.ahead however give.it.a.try
 'Go ahead, let it be so!' (MEi-74)

Actually, in most cases of co-occurrence of a particle and a verb with a postbase that has a related semantic content, a strict synonymy and free variation are not present. There is rather some semantic complementarity, usually in that the particle adds emphasis to the postbase. This pattern exists even in combinations of native particles and postbases (see *tanem* and *-laatagh-* in examples 47 and 48 above), so the Chukchi postbases exploited a pattern of complementarity already present in the language. In such cases of semantic complementarity, co-occurrences of a particle and certain postbases are not only possible, but even desirable. For example, the particle *enngaatal* 'extra' can add emphasis to the Class-Free (NN or VV) postbases *-ghllag-* 'a lot of N' (51 and 52), *-pestaagh-* 'to truly V' (53), *-pig-* 'really N' (54), *-pigte-* 'to really V' (55), and *-(ngw/w)aagh-* (56) 'to V thoroughly':

- (51) Ighivgaq kiighwyaghllaguuq elngaatall.
 ighivgagh- kiighwyagh-ghllag-(ng)u-uq elngaatall
 last.night northern.light-a.lot.of.N-be.N-IND(3s) extra
 'There were a lot of northern lights last night.' (SI-79)
- (52) Elngaatall aliinaghllugllaguuq.
 elngaatall aliinaghllug-ghllag-(ng)u-uq
 extra clear.day-a.lot.of.N-be.N-IND(3s)
 'It's very very clear' (said after someone has already told the speaker that the
 weather is very clear). (GOL-pc)
- (53) Enngaatall aglaatepestaaghllaqaghput.
 enngaatall aglagh-(u)te-pestaagh-lleqe-aghput
 extra go.home-V.with-truly.V-FUT-IND(1p-3s)
 'Sure, we will take him home.' (MEC-269)
- (54) Enngaatall amsanaghllupiguuq.
 enngaatall amsanaghllug-pig-(ng)u-uq
 extra calm.day-really.N-be.N-IND(3s)
 'Absolutely beautiful weather set in.' (MEC-269)
- (55) Elngaatall qayughyupigtunga.
 elngaatall qayugh-yug-pigte-unga
 extra drink.tea-want.to.V-very.V-IND(1s)
 'I really really want to drink tea.' (GOL-pc)
- (56) Elngaatall, qavanghitngwaaghtunga!
 elngaatall, qavagh-nghit⁰e-(ngw/w)aagh-tunga
 extra sleep-NEG-completely.V-IND(1s)
 'I did not sleep at all!' (GOL-pc)

Similarly, the particles *urang* 'very much' and *yeghrat* 'too much' often occur with intensifying postbases such as *-ghllag-* 'to V a lot', *-pagllag-* 'to V too much', *-pestaagh-* 'to truly V' *-pigte-* 'to really V', reinforcing them. One example is

- (57) ugatnginapagllagtuq yeghrat
 ugate-(ng)inagh-pagllag-tuq yeghrat
 go.west-only.V-V.too.much-IND(3s) too.much
 'he is going much too far west' (NBK/3-40)

In the overwhelming majority of text examples, however, *enngaataall* or *eIngaataall* occur without postbases of similar meaning, as in (58), to be compared with (55) above:

- (58) Elngaataall qayughyugtunga.
 eIngaataall qayugh-yug-tunga
 extra drink.tea-want.to.V-IND(1s)
 'I really want to drink tea.' (GOL-pc)

Another example of a particle reinforcing or complementing the meaning of a postbase is the following. The particle *arekull* 'it turns out' and the postbase *-fte-/-pete-* 'it appears that V, to evidently V' often co-occur in SLI texts from older speakers (Irrigoo et al. 1978:2; Angi et al. 1975:6, 14-16; Siwooko and Kulukhon 1975:2, 11) and in the SFE (Menovshchikov 1967:220). *Arekull* is not very common in SLI everyday speech, however. In (59), the speaker is reminiscing on pictures in a children's storybook:

- (59) (...) sangwaa esghapagaqeftaa arekull.
 sangwaa-Ø esghapag-aqe-fte-aa arekull
 something-ABs watch-PROG-evidently.V-IND(3s-3s) it.turns.out
 '(...) it appears he is watching something.' (NBK/1-37)
- (60) Apayepayiighllaguftughnguq aghnaghaq taana arekull.
 apayepayiigh-ghllag-(ng)u-fte-uq=nguq aghnagh-ghagh*-Ø taa-na-Ø
 arekull
 spider-big.N-be.N-evidently.V-IND(3s)-it.is.said girl-little.N-ABs
 here(D:R)-na-ABs it.turns.out
 'It appeared that that girl was a big spider, it is said.' (SLd-2)

The meanings of the particle and the postbase are not identical here, but rather complementary, since *arekull* adds an element of surprise and wonder that something has already happened. That the meaning is not the same is confirmed in that *arekull* can occur with a verb with the Past Tense postbase *-(i/u)ma-* and a Participial (INP or

TRP) mood. A verb with this combination of tense and mood indicates that the action or state expressed by the verb has not been witnessed by the speaker. The postbase *-fte/-pete-* implies that the speaker witnessed at least the result of the action expressed by the verb, and therefore it cannot co-occur with the postbase *-(i/u)ma-* and INP or TRP combination. With this combination, only *arekull* can convey the meaning 'it appeared':

- (61) *Arekull teghha sameng kakivikumakangat.*
arekull tegh-(ng)a sa-meng kaki-vike-(i/u)ma-kangat
it.turns.out behind-AB(3s-s) something-MDs sew-
have.an.object.of.one's.V-ing-PST-TRP(3p-3s)
 'It appeared they had sewn something on his behind.' (NBK/7-15)
- (62) (...) *ukfigmun arekull mayuimalghiik.*
ukfig-mun arekull mayugh-(i/u)ma-lghiik
tree-TMs it.turns.out climb-PST-INP(3d)
 '(...) it appeared they had climbed on that tree.' (NBK/1-38)

Other frequent co-occurrences of particles and postbases are given below. None of these are obligatory, and all are semantically conditioned.

The particle *emta* 'this time (act differently)', often occurs with the OPT mood (63), the negative APO mood (64), and the VFO mood (65), or various postbases expressing requests, commands, or wishes, such as *-fqagh-* (66), *-lgha-* (67), but it does not always occur with this semantic grouping of moods and postbases, as shown in (68):

- (63) *Emta nepiighutagtigu.*
emta nepiigh-(u)te-agh-ig-igu
this.time fall.silent-TR-suddenly.V-OPT(2s-3s)
 'Be silent about it this time.' (SL-15)
- (64) *Emta muluughpenang!*
emta muluugh-gpe-nang
this.time be.late-NEG-APO(2s)
 'Don't be late again!' (BAB-57)

- (65) Avuteghqennayukama emta!
avuteghqe-nayukama emta
regret-VFO(1s) this.time
'May I not regret it this time!' (BA-38)
- (66) Igaqigu aatghen emta anglipafqaan.
igae-igu ategh-n emta angli-pag-fqagh-(ng)an
write-OPT(2s-3s) name-AB(2s-s) this.time make.big-V a.lot-NEG.OPT-
RL(3s-s)
'Write your name but don't make it big this time.' (BAb-57)
- (67) Egmiinaq emta pilghaasi.
egmiinagh- emta pi-lgha-usi
hurry.up this.time do-FUT.OPT-IND(2p)
'Please hurry up this time.' (BAb-54-55)
- (68) Amigkun emta whanga qineghsuuqirugyalghiinga, (...)
amig-kun emta whanga-Ø qineghsuuke-i-qrug-yalghiinga
door-VLs this.time PN1-ABs look.at-HALF.TR-good.old.S/A.V's-
IPO(1s)
'When I looked through the door this time, (...) ' (AN-36)

The particle *gaymaangi* 'maybe, very likely' occurs most often, but not necessarily, with *-nayagh-* 'would V' (Menovshchikov 1967:224):

- (69) Gaymaangi, whangallu iqalliyaghnayaghtunga.
gaymaangi whanga-Ø=llu iqalli-yagh-nayagh-tunga
maybe PN1-ABs fish-go.and.V-would.V-IND(1s)
'Perhaps I would go fishing too.' (MEc-224)

The particle *katam* 'only' and the NN (also VV) postbase *-(ng)inagh-* 'only, just' can co-occur (70). More often *whanga katam* 'only me' occurs (Angi et al. 1975:1, 48).

- (70) Katam whanganginaghhaagunga.
katam whanga-(ng)inagh*-ghhagh*-(ng)u-unga
only PN1-only.N-little.N-be.N-IND(1s)
'I'm just by myself.' (GOL-pc)

The particle *talwa* 'even' often occurs with inherently negative verbs such as *aviite*- 'to be absent', *nalluke*- 'to not know' (71), or a NEG postbase *-nghit*^o*e*- or *-gpe*- (with APO mood) 'to not V', *-(ng)it*^o*e*- 'to not be N or V' (72), *-(ng)igat*^o*e*- 'to never V' (73). In these cases, the combination of particle and postbase means 'not even'. When no NEG postbase or negative verb is present, the meaning is just 'even' (74):

- (71) *Talwa nallukunga, naten guusimazinga?*
talwa nalluke-unga na-ten guute-(i/u)ma-zinga
 even not.know-IND(1s) where-EQ shoot-PST-INT(1s)
 'I don't even know, how should I have shot?' (MV-240)
- (72) *Kay, angyaput tagillequt neqngunaamta talwa!*
kay angyagh-put tagi-lleqe-ut neqe-(ng)it^o*e-naamta talwa*
 oh boat-AB(1p-s) come-FUT-IND(3p) food-not.have.N-APO(1p) even
 'Oh dear, our boat will come and we don't even have any food ready!'
 (BAB-93)
- (73) *Talwa igleghsigatuq!*
talwa igleghte-(ng)igat^o*e-uq*
 even travel-never.V-IND(3s)
 'This (snow machine) doesn't even work!' (GOL-pc)
- (74) (...) *talwallu esla pinightestaqluku ayuqegkangat yughakun.*
talwa=llu esla-Ø pinigh-(te)ste-aqe-luku ayuqe-kangat yughagh-kun
 even-also weather be.good-CAUS-PROG-APO(3p-3s) be.like-TRP(3p-3s)
 prayer-VLs
 '(...) and they even had a prayer that made the storms calm down.' (SLA-15)

It should be noted, however, that the existence of patterns of semantic restrictions and co-occurrences such as the ones described in examples 51 through 74, is not entirely due to Chukchi influence. Rather, Chukchi influence has merely extended existing patterns, since, as already seen in examples 47 and 48, similar co-occurrences and conditionings exist in combinations of the handful of etymologically Eskimo particles with postbases.

In the next set of examples, combinations of various postbases and an originally Eskimo particle, *salin* 'still', are illustrated. This particle is functionally identical to

and cognate with CAY *cali* 'more, furthermore, again, also, still, yet, and' (Jacobson 1984:104) and partially cognate to North Alaskan Inupiaq *suli* 'still, yet' (MacLean 1980:61).

Salin occurs most often with the postbase *-(ng)igat^oe-* 'to never V' (HEN-passim) in order to express 'not yet':

- (75) Kaasigatuq salin.
 kaate-(ng)igat^oe-uq salin
 arrive-never-IND(3s) still
 'He hasn't arrived yet.' (WAGa-pc: o)
- (76) Kaasigataat?
 kaate-(ng)igat^oe-at
 arrive-never.V-INT(3p)
 'Have they arrived yet? (lit., "They never arrived?")'

Salin. (Answer)

salin

still

'Not yet (lit., "It is still the case that they never arrived")' (BAB-203)

The sentences in 77 through 86 were constructed by me and submitted to two native speakers (Jim Toolie and John Waghiyi, Jr.) for grammatical judgments. Sentences with other NEG postbases such as *-(ng)it^oe-* 'to not have or be N' (77) and *-llghit^oe-* 'to not V' (78) were accepted:

- (77) Salin angyiituq.
 salin angyagh-(ng)it^oe-uq
 still boat-not.have.N-IND(3s)
 'He does not have a boat yet.' (NBK/8-45)
- (78) Salin neghellghitaa.
 salin neghe-llghit^oe-aa
 still eat-NEG-IND(3s-3s)
 'He did not eat it yet.' (NBK/8-46)

There were, however, disagreements over other very similar sentences with the NEG postbases *-naanghit^oe-* 'to not V in the future' and *-nghit^oe-* 'to not V'. For

unclear reasons, these were accepted by Toolie, but rejected by Waghiyi, Jr., as artificial and incomplete.

- (79) Salin neghnaanghitaa.
 salin negh-naanghit⁰e-aa
 still eat-FUT.NEG-IND(3s-3s)
 'He won't eat it yet.' (NBK/8-48)

- (80) Salin neghenghitaa.
 salin neghe-nghit⁰e-aa
 still eat-NEG-IND(3s-3s)
 'He did not eat it yet.' (NBK/8-55)

With negative commands, which can be direct, with the negative APO mood (81), or indirect, with the postbase *-(te)snanigh-* 'to tell not to V' (82), *salin* is semantically odd since here the scope of negation is over the whole predicate. Such sentences were rejected by Toolie and Waghiyi, Jr.

- (81) Aghulaqsaqunang.
 aghulaqe-yaqu-nang
 leave-not.ever.V-APO(2s)
 'Don't ever leave.'

*Salin aghulaqsaqunang.
 *(I not yet command) you to leave.' (NBK/8-58)

- (82) Qavaghtesnanighaa.
 qavagh-(te)snanigh-aa
 sleep-tell.not.to.V-IND(3s-3s)
 'He told him not to sleep.'

*Salin qavaghtesnanighaa.
 *'He not yet told him to sleep.' (NBK/8-56)

In order to get the negation to have scope only over the inner verbs 'to leave' (83) and 'to sleep' (84), *wiin* 'not yet; not now', a particle of Chukchi origin, must be used:

- (83) Wiin aghulaqsaqunang.
 wiin aghulaqe-yaqu-nang
 not.yet leave-not.ever.V-APO(2s)
 'Don't you try to leave yet.' (NBK/8-58)
- (84) Wiin qavaghtesnanighaa.
 wiin qavagh-(te)snanigh-aa
 not.yet sleep-tell.not.to.V-IND(3s-3s)
 'He told him not to sleep yet.' (NBK/8-56)

Other rejections of sentences with *salin* were due to cases of clear semantic conflict.

- (85) Salin qiyangigatuq.
 salin qiya-(ng)igat^oe-uq
 still cry-never.V-IND(3s)
 'He hasn't cried yet.' (NBK/8-42)
- (86) *Salin qiyaaq.
 salin qiya-uq
 still cry-IND(3s)
 *'He still has cried' (NBK/8-42)

Sentence 85 was accepted by Toolie and Waghiyi, Jr. (see also 75, but 86 was rejected by both for semantic reasons. Indeed, *salin* is semantically incompatible with perfective aspect. In 86, this perfective aspect is inherently present, being conveyed by a verb in the IND mood without any postbases, and the sentence is therefore ungrammatical. In 85, this inherent perfective aspect is canceled by the postbase *-(ng)igat^oe-*. With other verb moods, such as the APO (87 and 88), the C10 (89), and the INT (90), this perfective aspectual connotation is not inherently present, and therefore *salin* is grammatical even without a particular postbase:

- (87) Salin mekestaaghhaalunga tawansaghtunga.
 salin mekestaaghhagh*-(ng)u-lunga tawa-ni-et^oe-yagh-tunga
 still small.thing-be.N-APO(1s) there(DA:R)-LCs-be.N-V.in.vain-IND(1s)
 'When I was still small I was there.' (BAb-203)

- (88) George-m unaaq ungipaataanga salin qinuyuguniluku.
 George-m unaagh- ungipagh-(u)te-aanga salin qinuyug-(ng)u-ni-luku
 George-RLs this.morning tell-TR-IND(3s-1s) still sick-be.N-say.that.V-
 APO(3s-3s)
 George told me this morning that she's still sick. (HEN-23)
- (89) (...)uukna Alaska salin ugpeqelleghmeggni quutnguluku pamavek.
 uuk-na-Ø Alaska-Ø salin ugpeqe-llegh-meggni qute-(ng)u-luku pama-vek
 approaching(D)-na-ABs Alaska-ABs still believe-act.of.V-ing-LC(3Rp-s)
 land-be.N-APO(3s-3s) up(DA:O)-TM
 '(...) in their belief that there still was land connecting this part of Alaska to
 the other side.' (APc-4)
- (90) Salin apeghtughingwaaqsin Sivuqami?
 salin apeghtugh-i-(ng)u-aqe-zin Sivuqagh-mi
 still teach-HALF.TR-be.N-PROG-INT(2s) Gambell-LCs
 'Are you still teaching in Gambell?' (HEN-12)

To conclude on the results of this "positive" method, it appears that the influence of Chukchi particles on CSY postbase morphology exists, but it is not pronounced. There are many cases of free variation of combinations of semantically equivalent elements, here involving particles and postbases. It was argued that there is a difference of "expressivity" in the use of particles versus the use of postbases, but this "expressivity" could only be defined from a rather vague psychological point of view.

There are also many cases where combinations of a particle and a verb with a postbase having a related semantic content are desirable, in that they add emphasis on the particular semantic content of the postbase or modify it in some way. As with the enclitics, there are no cases of obligatory co-occurrences, in that a particular postbase never has to co-occur with a certain postbase or group of postbases in the verb. Cases of mutual exclusiveness of particles and postbases do not exist either.

For the second, "negative" method of investigating morphological influence I turned to the Eskimo language that is the closest non-Siberian relative of CSY, Central Alaskan Yupik (Jacobson 1984), and an Eskimo language rather distantly related to CSY, West Greenlandic (Bergsland 1955; Fortescue 1983, 1984). I compared the CSY productive VV postbases with the CAY and West Greenlandic productive VV postbases from a semantic point of view in order to find out whether CSY lacks any particular semantic groupings that are well represented as particles.

Other types of postbases (NN, NV, VN) were not investigated since semantic differences in these are less likely to be comparable to the meanings of particles.

A classification of CAY or West Greenlandic postbases with meanings that do not appear to exist in productive CSY postbases is given below. The CAY postbases are given as in the postbase section in Jacobson (1984:423-602), the West Greenlandic postbases as in Fortescue (1983:36-50), and also with their glosses. Six rough semantic classes can be distinguished. It must be emphasized that this classification is purely semantic and does not take form or genetic relationship into account. For example, from a purely formal point of view, CAY *+kanir-* 'to V more with greater intensity' corresponds to CSY *-kanigh-* 'to be rather, fairly V', but not semantically. Conversely, there are many CSY and CAY postbases with the same meaning, but totally unrelated forms; examples are CAY *-llini-* 'to V without being directly observed by the speaker' (Jacobson 1984:490) and *-ngqerr-* 'to have N' (Jacobson 1984:517) and which are respectively the exact semantic correspondents of CSY *-fte /-pete-* and *-lgu-* (Badten et al. 1987:281).

Of note is that I have not found Greenlandic correspondents for semantic class 6. I am uncertain of the significance of this gap; more study of comparative Eskimo postbase morphology will be necessary to determine whether it is due to CAY innovation with respect to Proto-Eskimo or whether it is due to Greenlandic postbase loss. If it turns out to be due to CAY innovation, the postbase involved would not have existed in the protolanguage that was the ancestor of CSY, and then its absence in CSY would have had nothing to do with Chukchi influence.

(91)

1. Exclamatives.

CAY:

@ I +~na 'oh, how it causes one to be V!'

@ 5 +paa/~vaa, @ 5 +pag/~vag (HBC dialect) 'oh, how V!; my, how V!'

@ 5 +piiqla- /~viiqla 'do not V so much!; stop V-ing!'

West Greenlandic:

ataar 'in a big way (exclamatory)'

+galuttuaqi/+galuttuar 'now we'll see/look out'

+naq 'how V it is!' (VN)

ngusar 'thank heavens/dear'

nnguarsi 'how V!' (VN)

2. To not have V-ed yet.**CAY:**-ksait⁰e- 'to not have V-ed (yet)'**West Greenlandic:**

+gallanngit 'not yet V for a long time/though expected'

nngikkallar 'not yet'

nngilir 'not yet V but should'

3. To not V enough.**CAY:**

-myag- 'to not V enough'

-vlaag- 'to V insufficiently, to not V enough'

West Greenlandic:

ngaanngit 'not especially'

+vallaanngit 'not so much'

4. To V more, to be more V.

CAY:

@2 + ~(ng)iinar- 'to V more and more'

+kaniir- 'to V a little more intensely, to become a little more V'

+kanir- 'to V more with greater intensity'

+kanirar- 'to V more and more, with greater intensity'

@5 liri- 'to become or cause to become more and more V'

@5 llru- 'to be more V'

-nru- 'to be more V' (but see example 43 in 1.6.3.2.)

-vsiar-, -vyiar- (HBC dialect) 'to V more toward completion, to V even more, to V more thoroughly'

West Greenlandic:

+galuttuinnar 'gradually more and more'

(+gi)jartuaar 'gradually more and more'

(+gi)jartur 'more and more'

+niru 'more'

+nirujussuar 'much more'

+nirumaar 'a little more'

5. To V also.

CAY:

@2 + ~mi- 'to V also'

West Greenlandic:

+(m)mi- 'and then V vivid'

6. To V instead of.

CAY:

@3:(u)cite- 'to V in place of, instead of, or for' (but not in the sense of 'for the sake of')

West Greenlandic:

None found.

In each of these groups, there are indeed semantically corresponding groups of particles from Chukchi in CSY, although I have not generally been able to determine how close the semantic correspondence is.

For group 1, the particles are *arekull*, *kakuuy*, *kukguy*, and variants 'wow!' The enclitic =Vy, also from Chukchi, can have an exclamative function with verbs: 'Oh V so much!' (see chapter 4, subsection 4.2.1), and therefore also belongs here. The other CSY particles that can function as interjections possibly belong here too.

For group 2, the corresponding particles are *ikiqu* 'not yet', *qaywa* 'consider before proceeding', and *wiin* 'not yet'.

For group 3, 'not enough', a strong case for a correspondence cannot be made since the closest particle is *qunereng* 'moreover' (with the implication that the thing referred to is insufficient). In view of this situation, I would predict that there actually are in CSY postbases corresponding semantically to the CAY and Greenlandic postbases 'to V not enough'. Possibly their absence in my data is due to chance or to some misinterpretation or oversight on my part.⁷

For group 4, the corresponding particles are *allameng* 'more', *elngaatal* 'extra', *wanlegi* 'more than ever', and *wata* 'more, furthermore'.

For group 5, the corresponding particles are *ama*, *enkaam*, *saama*, and *uunmek* 'and, also'.

For group 6, the corresponding particles are *emta* 'for a change', *giniwan* 'of course not', *miita* 'for a change', *puuru* 'instead', and *yeghlegi* 'contrary to expectation'.

There is thus in CSY a correspondence between the absence of certain CAY or Greenlandic postbases and the presence of particles with the same, or approximately the same, meanings. This correspondence is too close to be ascribed to chance. This means that it is possible the borrowing of Chukchi particles caused some pre-CSY postbases to disappear. It does not, however, imply that pre-CSY must have had these postbases in the first place, since it is logically possible that it never had the semantic counterparts of the CAY postbases. Likewise, there is no implication that these lost pre-CSY postbases had to be cognates of the CAY or Greenlandic

⁷ There are, however, several particles meaning 'enough' in CSY. The only ones of certain Chukchi origin are *entagham* and *masinka*, which are rare or nonexistent on SLI. The most frequent particles with this meaning are etymologically Eskimo or of uncertain origin: *ahaa*, *ahaamangam* or *haam*, *tawatenggam*, and *kaakaangam*.

postbases, since we are only taking meaning into account. However, since it is known that Eskimo languages generally do have postbases with the meanings of the CAY or Greenlandic postbases given above, it is most likely that the corresponding CSY postbases were indeed lost under the influence of the synonymous postbases.

There is additional evidence for postbase loss in that such a process is ongoing in Naukanski (Menovshchikov 1986:70-71). There is also evidence that this process is ongoing in CSY. For example, the postbase *-msag-* 'to finally V', given in SFE sources (Bogoraz 1949:216; Menovshchikov 1967:52), is rare, especially on SLI, where only two occurrences are documented; one is

- (92) *aglamsagtuq*
aglagh-msag-tuq
 go.home-finally.V-IND(3s)
 'he finally went home' (BAB-19)

CAY has two common postbases with the same meaning: *@+/(g/t)urinar-* 'to finally V after desiring to do so, but being prevented by circumstances' (Jacobson 1984:582), and *+~yaqlir-* 'to finally V' (Jacobson 1984:592). Greenlandic has *gi* 'at last' and *rataqi* 'at last, finally' (Bergsland 1955:114; Fortescue 1984:295), even though it is not clear that these primarily mean 'finally' (Jerrold Sadock, personal correspondence); Copper Inuit has *+galugtar* 'finally' (Fortescue 1983:45) and North Slope Inupiaq has *lrataq/gataq* 'finally' (Fortescue 1983:45). CSY has the Chukchi particles *qemall* and *qenwat*, of which *qenwat* is the most common way of expressing 'finally' in the language. So, it is very likely that *qenwat* is in the process of making CSY *-msag-* obsolete.

Similarly, there might be a correlation between the relative infrequency of the CSY postbase *-yaghaaghte-* 'to be time to V' and CSY having several interjectional particles from Chukchi expressing the same idea: *enta* 'let's go, time to go!', *kergam* 'ready to act' (meaning unclear), *legan*, *weni* 'go right ahead', and *yeqay* 'let's do it!'. CAY has two postbases meaning 'to be time to V': *@I + ari-* 'to be time to V' and *-~yunari-* 'to be the proper time to V'; Greenlandic does not appear to have a postbase with this meaning.

Postbases with meanings 'to perhaps V, think that V, not know whether V' also appear to be rare in CSY, but common in other Eskimo languages. CAY postbases are: *@3:(u)ciit^oe-* 'to not know whether one is V-ing, to not know how one is with respect to V-ing'; *+ciqli-/@5 ciqli-* 'to perhaps be going to V'; *-kutag-* (NUN and HBC dialects) 'to maybe be going to V'; *-lli-* 'to maybe V, to perhaps V';

@1 +~*nayuke*- 'to think that oneself or another might V'; @2 +~*ngat*^e- 'to seem to be V-ing, to perhaps V, to maybe V'; +~*yugnarqe*- 'to probably V'; and +~*yuke*- 'to think or believe that oneself or another is V-ing'. West Greenlandic postbases are +*gunar*- 'it seems/no doubt'; +*junnarsi* 'probably/no doubt'; +(ga)*sugi*⁺ (-*nnig*⁻) 'think that'; +(ga)*suri*⁺ (-*nnig*⁻) 'think that'; +*nirt*-(*suq*) 'if perhaps/I wonder'; *nnguatsiar* 'probably/as far as one can see'; *ssanga*(*tit*⁺) 'think V will'; and +*tit*⁺ 'think'. To match these postbases, CSY has only -*yengagh*- 'it looks like V; I think that V', which is rare and probably archaic, and -*yuke*- and -*nayuke*- (see section D, 5, in the classification in chapter 2, subsection 2.5.3), which are discussed in the paragraphs below.

The semantically corresponding particles of Chukchi origin are *agnepa* 'I think'; *gaymaangi* 'maybe, come to think of it'; *enekiitek* 'maybe'; *entaqun* 'I think'; *iitegqun* 'perhaps'; *langetaq* 'I think'; *luuraq*, *miwen*, *qemall*, and *wiisam* 'maybe'.

Besides actual postbase loss, there is the possibility of loss of productivity caused by the borrowed particles. I have already noted in chapter 2, subsection 2.2.1.1, that the relative number of nonproductive VV postbases is much higher in CSY than in CAY. There exist in CSY two semantically and formally related Imputative postbases, -*yuke*- 'to think or believe that oneself or another is V-ing' and -*nayuke*- 'to think that oneself or another might V', that are being lost as productive postbases, apparently under the influence of Chukchi particles (given in the paragraph above). It is interesting that the morphological forms of -*yuke*- and -*nayuke*- have not disappeared, since both -*yuke*- and -*nayuke*- became markers of the productive VFO inflectional verb mood, already discussed and exemplified in chapter 1, subsection 1.6.3.3.

Furthermore, the form -*yuke*- also appears as an element of "real" verbal derivational morphology as the nonproductive postbase -*yuke*- 'to feel V toward', used only after certain emotional verb bases and roots. It thus appears that these originally productive postbases have undergone what one would call a process of "morphologization," with some accompanying semantic change, assuming of course the "internal syntax" of Eskimo is not "real" morphology. -*yuke*- can become "morphologized" in this sense in two positions in a verb, one close to the base, becoming an element of "real" derivational morphology, and another under the INFL, becoming an element of inflectional morphology. -*nayuke*- only becomes an element of inflectional morphology.

For productive postbases to have derivational nonproductive versions is a common occurrence in Eskimo morphology, and one that was described in chapter 2,

subsections 2.2.1.2, and 2.2.1.3. But as far as the VFO mood markers are concerned, one might ask whether my assumption that they come from Imputative postbases is based only on comparative considerations, since there are in CAY and in Greenlandic cognates that are productive Imputative postbases, i.e., CAY *+~yuke-* 'to think or believe that oneself or another is V-ing' and *@I +~nayuke-* 'to think that oneself or another might V', and Greenlandic (*ga*)*sugi/suri* 'to think that V'. Actually, there is evidence that the forms *-yuke-* and *-nayuke-* existed at one time in CSY as productive Imputative postbases and that their restriction to INFL position is a recent phenomenon. In the dialogue lines of several versions of the same CSY *ungipaghaan*, or traditional story, I have found examples of Imputative *-yuke-* and *-nayuke-*. Their presence in folklore texts and, in particular, in dialogue spoken by mythical beings or animals, as is the case here, is not surprising: the stories are memorized and passed from generation to generation and therefore contain fossilized forms now archaic and obsolete. As expected, the storyteller has trouble giving the precise meaning of words containing these forms, and seems to rely on the context to translate them. Examples with *-yuke-* are 93 and 94; an example with *-nayuke-* is 95.

- (93) itemuteqaghnaaghyukamsi
 iteme-(u)te-qaghte-naagh-yuke-amsi
 come undone-TR-please.V-V.eventually-think that.V-IND(1s-2p)
 'I think I will untie you (pl.) eventually' (SLb-3; SEP-3; T/52-9)
- (94) itemuteqaghnaaghyukamken
 iteme-(u)te-qaghte-naagh-yuke-amken
 (same as above) -IND(1s-2s)
 'I think I will untie you eventually' (T/43-17, 18a)
- (95) itemuteqaghnnayukamsi
 iteme-(u)te-qaghte-nayuke-amsi
 (same as above) -think that.might.V-IND(1s-2p)
 'I think I might untie you (pl.)' (RO-1)

Speakers also sometimes inflect the postbase as if it were a VFO mood marker, due to the obvious similarity with the VFO mood marker *-nayuk(a)-*. Two forms from different versions of the same story illustrating this are 96, with the IND mood, to be contrasted with 97, apparently inflected as though it contained a VFO mood.

- (96) kumakightekaghnaaghyukaghpenga
 kumakigh-(s)te-kagh-naagh-yuke-aghpenga
 pick.lice-V-er-have.as.one's.N-eventually.V-think.that.V-IND(2s-1s)
 'you think you will have me as your lice-picker' (RO-2)
- (97) kumakighteknaaghyukavnga
 kumakigh-(s)te-ke-naagh-yukavnga
 pick.lice-V-er-have.as.one's.N-eventually.V-VFO(2s-1s)
 'you think you will have me as your lice-picker (lit., "for fear that you might have me as your lice-picker")' (Linda Badten, personal communication 1985)

It is clear from the context and from their semantics that forms 93-97 all occur in main clauses; if they occurred in dependent clauses, it would be possible to claim for 93 through 95, in which the sequences VFO plus person inflection and *-yuke-* plus IND inflection happen to be homonymous, that they contain examples of the VFO mood. However, 96 unambiguously contains an IND person inflection, and 97 unambiguously contains an oblique person inflection, appropriate with a VFO, but not with an IND. The form in 98, occurring in another version of the same story, but in exactly the same place, does not contain *-yuke-*, and is unambiguously in the IND mood, and therefore in a main clause, providing additional evidence that none of the above forms contain a VFO mood inflection.

- (98) kumakightekaghnaaghhaghpenga
 kumakigh-(s)te-kagh-naagh-aghpenga
 pick.lice-V-er-have.as.one's.N-eventually.V-IND(2s-1s)
 'you will have me as your lice-picker.' (SLb-7; T/43-19; T/52-10)

It is significant that in the corresponding words in versions of the same tale from the SFE these Imputative postbases do not occur. This shows that Chukchi influence is more pervasive in the SFE than in SLI and that the SFE usage of postbases is less conservative. The VFO mood itself is well attested in SFE texts and grammars (99, 100) (Menovshchikov 1967:171-73; Rubtsova 1954:126).⁸

⁸ A more detailed discussion of *-yuke-*, *-nayuk(a)-* and their historical relationship to the VFO mood is presented in de Reuse (1992).

- (99) itemunnaanghitamsi
 iteme-ute-naanghit⁰e-amsi
 come undone-TR-FUT.NEG-IND(1s-2p)
 'I will not release you' (ME-33, 34; RU-114)
- (100) qepghaghteknaaghaghpenga
 qepghagh-(s)te-ke-naagh-aghpenga
 work-V-er-have.as.one's.N-eventually.V-IND(2s-1s)
 'you will have me as a worker' (RU-115)

Cases like the above considerably strengthen the argument for productivity loss and also, indirectly, the argument for postbase loss. The influence of particle borrowing on postbase loss should not be exaggerated, however, since it has never caused all the synonymous CSY postbases to disappear; there remain many co-occurrences of postbases and particles. There are also many particles with meanings that Eskimo postbases do not appear to have, and these will of course never be expected to have an influence on postbase morphology.

6.7. Conclusions

I established in this chapter that there is indeed a large number of Chukotan loanwords in all varieties of CSY. There is very little evidence that there were borrowings from Chukotan languages other than Chukchi, even though the Chukotan languages Alutor and Kerek might have themselves undergone Eskimo influence in earlier prehistory. It is striking that more than half of the Chukchi loanwords in CSY are particles (i.e., sentence adverbs, conjunctions, and interjections) and that many of these are among the most frequent Chukchi loanwords in CSY.

I based my explanation of this situation on the ease with which syntactic particles can be borrowed in a particular situation of moderately intensive contact and on external historical evidence for an extinct Eskimo-Chukchi trade-jargon superstructure which facilitated the adoption of Chukchi loanwords into CSY. These loanwords were in many cases synonymous or near-synonymous with the native Eskimo adverbial derivational suffixes, or postbases. Several strategies for dealing with this synonymy arose. These included convergence, semantic specialization and complementarity, specialization in certain syntactic or morphological environments, and differences in psychological salience. As a result, many CSY particles became fully integrated into the morphological and syntactic systems of the language. For other particles, however, this integration was only achieved after the loss of the

synonymous postbases or at least the loss of their productivity. Thus, these particles have reduced the number of productive verbal postbases in CSY, which is now somewhat smaller than in the other Eskimo languages.

Having demonstrated that processes of morphological simplification can apply even to languages as thoroughly polysynthetic as Eskimo, I need to consider the question of whether this evolution is originally internally motivated or whether it is entirely due to external causes. In other words, is the evolution described here possible because there is a natural tendency within a polysynthetic language such as Eskimo to lose morphology if language contact and consequent borrowing give it the opportunity to do so, or was this evolution due only to sociolinguistic factors? Thomason and Kaufman (1988:13-14) point out that the structure of a language does not determine what can happen to it as a result of outside influence, and then proceed to refute several linguistic constraints, including typological ones, implicational universal constraints, and constraints based on naturalness, giving solid evidence to back up their point of view (pp. 14-34). In considering some of these constraints in relation to the CSY situation, I found that the naturalness constraint, which claims that changes will take place in the direction of less-marked structures, does not fare well, since CSY, a polysynthetic language with a complex external particle syntax, cannot be seen as less marked than a more homogeneous polysynthetic language (i.e., with a much less complex particle syntax), such as Greenlandic.

Implicational universal constraints state that the borrowing of a particular feature will imply that another feature or set of features has been borrowed. This type of constraint is also not very appropriate for CSY, since one would not expect a language to borrow so many particles without a far greater proportion of content word loans.

A widely accepted typological constraint was proposed by Jakobson (1962:241): "A language accepts foreign structural elements only when they correspond to its own tendencies of development." However, I am unable to answer the question whether there is really in CSY a tendency toward reducing its array of postbases, since the answer to this question depends of course on how one defines a tendency, and this is a matter not solved by Jakobson. Indeed, as pointed out by Thomason and Kaufman (1988:17), attempting to define a tendency results in circularity, since a particular type of borrowing would be considered evidence for the presence of a particular tendency.

Another kind of typological constraint basically expresses the idea that when two different typological patterns interfere, one can somehow predict the direction of the resulting linguistic change. For example, Weinreich (1968:41) proposes that "in the interference of two grammatical patterns it is ordinarily the one which uses

relatively free and invariant morphemes in its paradigms . . . which serves as the model for imitation." This concept is of course related to the idea, given in subsection 6.5.2, that particles are easy to borrow since they do not disrupt the typological distinctiveness of the language. This kind of typological constraint is thus applicable to CSY.

Furthermore, we have seen in the preceding subsections that CSY possesses native Eskimo particles that interact with verb moods or with postbases in the same ways particles from Chukchi interact with these elements. Similarly, combinations of native Eskimo particles with postinflectional postbases or lexicalized enclitics exist, and combinations of particles from Chukchi with the same elements are modeled on the native combinations. It is reasonable to assume that there are typological constraints preventing Eskimo from integrating loans in any other way. For example, I assume that the following possibilities of contact-induced language change would be too disruptive to an "internal" and "external" syntax as tightly knit as Eskimo and, therefore, that they would not occur: (a) suffixes (not including enclitics) from Chukchi borrowed as suffixes or as bases and (b) stems from Chukchi borrowed as suffixes (not including enclitics). This would be operative for languages as polysynthetic as Eskimo, but not necessarily for all morphologically complex languages. For example, some dialects of Ecuadorian Quechua, a morphologically complex agglutinating language, appear to have reanalyzed the sequence of an inflectional verb nominalizer *-k* and the independent verb stem *ri-* 'to go' as an inchoative verb derivational suffix *-gri-* (Muysken 1977:107). If this is a possibility allowed for by Quechua morphology, I would expect Quechua to be able to borrow a verb stem from another language as a verb suffix too (but I am not sure whether this has ever happened). As far as Eskimo is concerned, this type of borrowing would never be a possibility, and there are certainly no counterexamples to this claim.⁹

To conclude on the preceding points, contact-induced changes in CSY are slight in that there is very little functional trade-off between postbases and particles. Actually, CSY cannot be said to have typologically changed under Chukchi influence to any significant degree. Indeed, the Chukchi words in Eskimo are for the most part well integrated in a typically Eskimo structure: the complex semantic and syntactic distributional relationships between enclitics and particles from Chukchi and

⁹ It is true that Eskimo has a postbase following an inflectional ending that, at least in some languages, can also be an independent base (i.e., *et* ^o*e-*, discussed in chapter 2, section 2.1), but this morpheme probably had this special dual status already in Proto-Eskimo, and therefore it cannot be considered to have *evolved* into a suffix, as is the case in Quechua.

etymologically Eskimo postbases and verb moods are similar to the relationships between etymologically Eskimo particles and enclitics and Eskimo postbases and verb moods.

What about those particles of Chukchi origin that are *not yet* integrated into Eskimo grammar? Thomason and Kaufman (1988) do not consider that contact-induced language change is a process that could be reversed under certain circumstances. These circumstances would have to be sociolinguistic, since it is impossible to imagine language-internal conditionings for both a process and the reverse of that process. The reduction in the amount of synonymy between postbases and particles not yet integrated is still in progress, but it is evolving in different directions in the SFE and SLI, thereby reflecting different sociolinguistic situations. In the SFE, the integration of the small Eskimo communities within the larger Chukchi-speaking communities is actively encouraged, and as a result the replacement of postbases by particles is continuing. On SLI, direct Chukchi influence is no longer present, and as a result the original postbases tend to be more frequently used than in the SFE, and many Chukchi particles tend to become less frequent in the speech of those born in the period when relationships with the Chukchi were disallowed.

This work has shown how various points of CSY grammar are actually interrelated and how it is necessary to view Eskimo grammar as a structured and tightly knit whole, requiring both the approach of autolexical theory to elucidate synchronic relationships between CSY morphology, syntax, and semantics and a genetic and areal concentration to elucidate the diachronic relationships between these components of CSY grammar. Further research will be necessary to confirm or invalidate the more tentative statements proposed here, in particular on my treatment of postbase order and on constraints on language change.

Because the areas of postbase order, postinflectional postbases, enclitics, and particles are more relevant to the theory of morphology and syntax than they might appear at first sight, more research on all these areas would be promising and welcome. Advanced investigations carried out by trained native speakers in their own communities would be especially desirable and would carry the level of descriptive and explanatory adequacy far beyond the one attained in this study.

Finally, from the point of view of salvage linguistics, descriptive and comparative studies of the two other Soviet Eskimo languages (Naukanski and Sireniki) are urgently needed, and it is hoped that this work will encourage more cooperation between East and West in the field of Eskimo language research.

Abbreviations

A	Transitive subject
AB	Absolutive case
ABL	Ablative case (in Greenlandic only)
ADV	Adverb
APO	Appositional mood
AUX	Auxiliary
C	Consonant (in phonological representations)
CAUS	Causative postbase
CAY	Central Alaskan Yupik
CDO	Conditional mood
CFR	Free position; either clause initial or clause final (explained in chapter 6, section 6.3)
Ch.	Chukchi
CLF	Clause-final position (explained in chapter 6, section 6.3)
CLI	Clause-initial position (explained in chapter 6, section 6.3)
CONJ	Conjunction
CQO	Consequential mood
CSO	Concessive mood
CSY	Central Siberian Yupik
CTO	Contingent mood (in CAY only)
C1O	Contemporative 1 mood
C2O	Contemporative 2 mood
D	Demonstrative base
d	Dual number (used in morpheme glosses)
DA	Demonstrative adverb base
E	Extended (demonstrative base category)
EQ	Equalis case
FUT	Future tense postbase
HALF.TR	Half-transitive postbase (a type of detransitivizing postbase)
HBC	Hooper Bay-Chevak dialect of CAY
Imakl.	Imaklikski Inupiaq
IND	Indicative mood
INFL	Inflection
INJ	Interjection
INP	Intransitive Participial mood

INT	Interrogative mood
IPO	Intransitive Participial Oblique mood
IR	Independent Relative base
Kor.	Koryak
LC	Localis case
MD	Modalis case
MOD	Modifier
MODAL	Modality postbase
N	Noun base
n.b.d.	Never before described
Nauk.	Naukanski
NEG	Negative postbase
NI	Nelson Island dialect of CAY
NM	Nominal base
NN	Denominal nominalizing postbase
NS	Norton Sound dialect of CAY
NUN	Nunivak dialect of CAY
NV	Denominal verbalizing postbase
O	Transitive object
O	Obscured (demonstrative base category)
o	Overheard utterance
OPT	Optative mood
p	Plural number (used in morpheme glosses)
PL	Plural morpheme (following demonstratives)
PN	Pronoun
PRO	Precessive mood
PROG	Progressive aspect postbase
PROSP	Prospective modality postbase
PS	Positional base
PST	Past tense postbase
PT	Particle base
R	Restricted (demonstrative base category)
<R>	Root
RL	Relative case
S	Intransitive subject
s	Singular number (used in morpheme glosses)
SFE	Soviet Far East
Sir.	Sireniki

SLI	St. Lawrence Island
SP	Specifier base
TM	Terminalis case
TPO	Transitive Participial Oblique mood
TR	Transitivizing postbase
TRP	Transitive Participial mood
V	Vowel (in phonological representations)
V	Verb base
VF	Verb-final position (explained in chapter 6, section 6.3)
VFO	Volitive of fear mood
VFR	Free position; either verb initial or verb final (explained in chapter 6, section 6)
VI	Verb-initial position (explained in chapter 6, section 6.3)
VL	Vialis case
VN	Deverbal nominalizing postbase
VOC	Vocative
VV	Deverbal verbalizing postbase
1	First person
2	Second person
3	Third person
3R	Third person reflexive

The abbreviations above, and the underlying terminology, are mostly taken from Woodbury (1981:xiii-xvii), and used as in that work. A few of the abbreviations of my own invention are not self-explanatory and are explained in chapter 1, section 1.6.

References

Abbreviations are keyed to references found in the text. Abbreviations for unpublished sources are

JAC	Steven Jacobson's unpaginated class notes and exercises for a class in the structure of CSY taught at the Alaska Native Language Center, University of Alaska, Fairbanks.
JACa	Transcript of a Naukanski tape of a story by Nututein, written by Steven Jacobson and Linda Badten.
MET	Verb Metcalf's unpaginated class notes for a class in conversational CSY taught at Northwest Community College, Nome, Alaska.
SEP	Seppilu [1985], given with pagination of my loose-leaf analysis (12 p.).
WOO	Anthony Woodbury's unpublished notes on Chevak CAY.

The abbreviation NBK refers to notebooks, numbered 0 through 11, containing my field notes. The following abbreviations refer to fieldwork in loose-leaf unpaginated binders: "pc" refers to data provided by consultants on CSY particles borrowed from Chukchi. These particles are noted in a binder (PF) and listed alphabetically.

GOL-pc	Timothy Golodergen, communications on particles.
HEN	Analysis of sentences translated from English dialogues in Hensel et al. (1980), originally in NBK/2-21-71 and NBK/4-61-69.
IR-pc	Gordon Irrigoo, communications on particles.
NBK/5a	Analysis of text originally in NBK/5-2-23.
PF	Particle file.
TOO-pc	Jim Toolie, communications on particles.
WAG-pc	Della Waghiyi, communications on particles.
WAGa-pc	John Waghiyi, Jr., communications on particles.
WON-pc	Nick Wongittilin, communications on particles.
T/43,	Transcripts of tapes with recordings of <u>ungipaghaatet</u> and
T/44	historical accounts by Jim Toolie, not yet translated.

- T/52, Transcripts of tapes with recordings of ungipaghaatet and
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